

<110> Lodes, Michael J.
Mohamath, Raodoh
Henderson, Robert A.
Benson, Darin R.
Secrist, Heather

<120> COMPOSITIONS AND METHODS FOR
THE THERAPY AND DIAGNOSIS OF LUNG CANCER

<130> 210121.475C10

<140> US

<141> 2001-05-11

<160> 735

<170> FastSEQ for Windows Version 3.0

 $\langle 210 \rangle$ 1

$\langle 211 \rangle$ 339

<212> DNA

<213> Homo sapien

<400> 1					60
gtactcagac	aggatagtc	tcatgtagca	caaagcamat	cctgtttcta	tacttgtagt
ttgctctcac	tcagtgcat	ratcattact	atacagtgta	gaatgttrtt	atgtagcata
gatgtggggg	ctctagccca	cagctctsta	cctttgtcta	gcactcctgt	cctcatacct
ragtggcctg	tccatcagca	tgtttctcat	ctactttgct	tgtccagtc	actgtgggtcc
tcccttgccc	tctcccttat	gtggcagagt	ggaaccagct	gtcctgagac	ttgagttcaa
catctggttc	gcccatytc	atgtttgtgg	tctgagtac		339

 $\langle 210 \rangle$ 2

<211> 698

<212> DNA

<213> Homo sapien

 $\langle 220 \rangle$

```
<220>
<221> misc_feature
```

<222> (1) ... (698)

<223> n = A, T, C or G

<400> 2					60	
gtactcagac	cacgactgca	ttttctccac	tgctgacggg	tctaatacca	gctgcttccc	120
tttcttgag	gcagagctng	tgaccttgag	aaagtgacct	gtgaccatca	tgtgggtagt	180
gagctgctgc	aaggtgtcat	gggagctccc	acactccatg	cactttwaga	tctgggactt	240
gcaggcctca	ractgccagg	tgtagctcgc	tccattttgg	tagccatagc	gsttggtgga	300
ggacaactgc	aagttggcgt	tcttctgaga	agaaaaagaa	tctgcaaaag	atcctgtggt	360
tgaactgggg	gaacacggcc	gattgacatc	aaaaacgcgt	ttcttagccc	gggtgaccat	420
tttcgaggaa	atggttgggg	actggctcct	tcaaaggcac	tttttggtta	tgttttgttt	480
yaatcatgk	gacgtccaa	tcttggragg	gaatcgaang	rantcncnc	caaacatrc	

```
<210> 3
<211> 697
<212> DNA
<213> Homo sapien
```

```
<220>  
<221> misc_feature  
<222> (1)...(697)  
<223> n = A,T,C or G
```

```
<210> 4
<211> 712
<212> DNA
<213> Homo sapien
```

```
<220>  
<221> misc_feature  
<222> (1)...(712)  
<223> n = A,T,C or G
```

<210> 5

```
<220>  
<221> misc_feature  
<222> (1)...(679)  
<223> n = A,T,C or G
```

```
<210> 6
<211> 369
<212> DNA
<213> Homo sapien
```

```
<220>  
<221> misc_feature  
<222> (1)...(369)  
<223> n = A,T,C or G
```

```
<210> 7
<211> 264
<212> DNA
<213> Homo sapien
```

```
<220>  
<221> misc_feature  
<222> (1)...(264)  
<223> n = A,T,C or G
```

<400> 7
tgctggatra gggatggggc acgggagcac agatmgactt taactgcccc cacgtntntcm 60

```
<210> 8
<211> 280
<212> DNA
<213> Homo sapien
```

```
<220>  
<221> misc_feature  
<222> (1)...(280)  
<223> n = A,T,C or G
```

<400> 8					60
acctcaactg	cccanaacan	aactgttgta	caagatttga	ggatttaaca	atatttcaca
tgaaatat	cagacctacg	ngagggtcta	aagacnaatt	aaatgagcac	cngtgtgcc
accgcccna	ttaagaatta	gagcaagcag	tgagggtgaag	ccttgtcctt	gcttttaaca
tagaaagtga	tccaaattca	ccaaacttga	cttnnggttt	tgcagtgtgg	cctcctgatt
ctagacnctg	gcgaaacatt	tgatgggcaa	aaaaaaaaa		280

```
<210> 9
<211> 449
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(449)
<223> n = A,T,C or G
```

<400> 9					60
tcgtcaactc	caggatggct	ttgaaaatna	atggacacag	atctctcctg	ttttgatrat
ntgcagtgct	natgactggc	tttgcagtn	attttgattc	aggcaacaga	tgttcctttt
ggttccctgt	ctcccatggg	cgctcatttca	tgttgtcctc	tgccctcccc	cagatattct
aagttcagga	cacaagcttc	tggcccatgc	agagcagagg	ccatgagggg	tcacagcatg
ggtacgggag	gaaacactgg	gctnaccag	atnctggact	tgagtcttgc	ctctgctgct
tgctgcacag	cttctgtcat	ggtgctaaac	ctgtgacctg	cctcacaggc	ttagagcatg
cccgtagaag	tactctnaac	taaratgctt	tccacaaatg	agatggtttc	atgaaaactt
caaatagagg	gcttgggcaa	aaaaaaaaa			449

```
<210> 10
<211> 538
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(538)
<223> n = A,T,C or G
```

<400> 10
tttttttttt ttcccaaagg cctcaraaca ctagtcttct aattccaagc agaaagtac 60

```
<210> 11
<211> 543
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(543)
<223> n = A,T,C or G
```

<400> 11						60
tttttttttt	ttgccacag	ctgccatctt	tgtgtgataa	ggccaacctt	ctatgggaat	120
caacctctgc	catcccagca	aatccctctc	ctcccttctc	atgggagtgc	cttgatttca	180
tcaggcatct	gggacttgat	gtgggtntgg	gatttgaaat	cagagcacct	nggtctctst	240
caccattctn	tcaattatta	gctctnacct	tgggtnaata	cctgccttag	tgtcntaggt	300
acaatatgaa	tattgtctat	ttctcagggg	ttgcaatgac	nagtnnatna	gtgcatgaga	360
gggtaaaaacc	acagggtact	ccgctctctc	naagaatgga	gaattttttc	tagaagccca	420
natntgcttg	gaaggttggc	cacnctagagc	cnnaatcttc	ttttatttnc	cactgaangc	480
ctaagaggna	attctgaact	catccccnna	tgacctctcc	cgaatmagaa	tatctctggc	540
acttaccata	ttttcttgcc	ctcttccact	tacnaaaactc	ctttattcct	taacnggacg	543
aaa						

```
<210> 12
<211> 329
<212> DNA
<213> Homo sapien
```

<400> 12						60
cgatgacttg	ggcagtgagt	gggcctcctg	ccaggtggca	gggcacagct	tagaccaaac	120
ccttggcctc	ccccctctgc	agstacctct	gaccaagaag	gaaactagca	agcctatgct	180
ggcaagacca	taggtggggt	gctgggaatc	ctcggggccg	gctggcacc	actcctgggtg	240
ctcaagggag	agaccactt	gttcagatgc	atrggcctca	ggcggttcaa	ggcrgtctta	300
gagccacaga	gtcaaataaa	aatcaatttt	gagagaccac	agcacctgct	gctttgatcg	329
tgatgttcaa	ggcaagttgc	aagtcatcg				

```
<210> 13
<211> 314
<212> DNA
<213> Homo sapien
```

```
<220>  
<221> misc_feature  
<222> (1)...(314)  
<223> n = A,T,C or G
```

<400> 13
 cgatgacttg caccgggag ctgtgacagt ggcttgaag cagatggcag ccccgtaag 60
 gcgggagtgg agaccacaa accctccaaa cagagcaaca actagtacgc ggccagcagc 120
 tacctgagcc tgacgccga gcagtggag tcccacagaa gctacagctg ccaggtcacg 180
 catgaaggga gcaccgtgga gaagacagtg gcccctacag aatgttcata gggtcccnac 240
 tctnacccca cccacgggag cctgganctg cangatcccg ggggaagggt ctctctcccc 300
 atcccaagtc atcg 314

<210> 14
 <211> 691
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(691)
 <223> n = A,T,C or G

<400> 14
 cgattacttg cacaatgcan attagaaccc aaatgaagg tacaaccag atcttctggc 60
 ttccagttca gtgctgctgg gtttttctta ctaaaccaaa acaatkaaga gcatagaagg 120
 gaagagaaga ataaagtcta ttttggtctt tggtagcchg ggtaangaga atgctstcac 180
 tctacnagaa aaccnnaagt gaaccgggt aatcaggacc gtgcttggga agggagcagg 240
 ggcattacct ttcaacacca gaggttcttt gccttctctc tgcagggact cgargactat 300
 gtgaagtggc tgggarggca tcaactcggt tggttcattg gtrttctcat cataaactat 360
 natttctttg gaaaaagatc ctcttgaaag artccttgcc ttcctacag gaaatcaagt 420
 ctaggacagt gatcttgccc ctgcttgcas tctccgccgg ctgatcttat csgscccagt 480
 tkatgtgsam cgctccttgg atrtkactct tgttttwctc cvaggaagg gcytgcmagt 540
 ccnwtnaatg amssgggccc ttaactccgg scrpgtnamy ncttgsctsc rattttgggt 600
 ycytcttctt ttgscmagg tcktcnaaac cacttngttr aattccccg sccgcctkcg 660
 nggtycaacc wttttgggaa mamcycccc c 691

<210> 15
 <211> 355
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(355)
 <223> n = A,T,C or G

<400> 15
 acctgaactg tgtgttgaag agtcatgtcc tgctgcctgg agctcaagtc actactgatg 60
 accgtgccta tgtccgacag ctagttncc ccatggatgt gactgagacc aatgtcttct 120
 tcyaccctcg gctcttacct ttgacnaagt ctcccgttga gactactacc gaaccaccag 180
 cagttcgagc ctctnaagag cgtctaagcg atggggatat atatttactg gagaatgggc 240
 tcaacctctt cctctgggtg ggagcaagcg tccagcaggg tgtgtgccag agccttttca 300
 gcgtctcttc cttcagtcag atcaccagtg gntngagtgt tctgccagtt caggt 355

<210> 16
 <211> 522
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(522)
 <223> n = A,T,C or G

<400> 16
 tcagtcacagt gaggtggaag acttcgaggc tctgtgggagc cgcttctcca agtctgctga 60
 tgagagacag cgcattgctg tgcagcgtan ggacgaactc ctccagcaag ctgcgagacg 120
 tttcttgaac aaaagttctg aagatgatgc ggccctcagag agcttcctcc cctcgggaag 180
 tgcgtcctct gaccccgatga cctnccgtcg aangatgctg gctgccgcg cggaacggan 240
 gcttcagaag cagcagacct cctnccgtcg ccttgccctc ctccagctgc tctgcgccc 300
 tgtgcccggc tgactggagg aggcctgtcc aattctgccc gcccctgga aaagcgggct 360
 tgactgcatt gccgctgtat naaagcatgt ggtcttacag tgtnnggacn gctnatnaat 420
 ttnatcctnc tntgtaatac ttcttatgtg acatttctct tccccttga aacactgcan 480
 attttaactg tgagtttgat ctcttctnct gttactggac tg 522

<210> 17
 <211> 317
 <212> DNA
 <213> Homo sapien

<400> 17
 gtgtcgcgaa ttcgcggtgg tgctaagaaa aggaagaaga agtcttacac cactcccaag 60
 aaggataagc accagagaaa gaaggttcag ccggccgtcc tgaaatatta taaggtggat 120
 gagaatggca aaattagttg ccttcgtcga gaggccccct ctgatgaatg tgggtgctgg 180
 gtgtttatgg caagtcactt tgacagacat tattgtggca aatgttgtct gaccactgt 240
 ttcaactaac cagaagacaa gtaactgtat gaggtaatta aagacatgaa ctaaaaaaaa 300
 aaaaaaaaaa actcgag 317

<210> 18
 <211> 392
 <212> DNA
 <213> Homo sapien

<400> 18
 tggagatttc taatgaggtg aggaagttcc gtacattgac agaattgatc ctccatgctc 60
 aggaacatgt taaaaatcct taaaaaggca aaaaactcaa gaaacacca gacttcccc 120
 agaagcccct gacccttat ttccgcttct tcatggagaa gcgggccaag tatgcgaaac 180
 tccaccctca gatgagcaac ctggacctga ccaagattct gtccaagaaa tacaaggagc 240
 ttccggagaa gaagaagatg aaatatgttc cggacttcca gagaagagaa acaggagttc 300
 gagcgaaacc tggcccgaatt cagggaggat caccctccac ttatccagaa tgccaagaat 360
 cggacatccc agagaagccc caagaccccc cg 392

<210> 19
 <211> 2624
 <212> DNA
 <213> Homo sapien

<400> 19
 gaaacagtga gaaggagatt cctgtgctca atgagctgcc agtccccatg gtggcccgct 60
 acattcgcat aaaccctcag tcttggtttg ataacgggag catctgcatg aggatggaga 120
 tcttgggctg cccactgccg gatcctaata actattatca ccgacgtaat gagatgacca 180
 ccacggatga cctggatttt aagcaccaca actattagga aatgcgccag ttgatgaagg 240

ttgtcaatga aatgtgcccc aatattacca ggatttacia cattggcaaa agccaccagg 300
 gcctgaaatt gtatgcggtg gagatctctg accatcctgg ggaacatgaa gttggtgagc 360
 ccgagttcca ctacatcgca ggggcccacg gcaatgaggt tctgggacga gaactgctgc 420
 tgctgctgct gcaattcctc tgccaggaat actcggcgca gaacgcacgc atcgtccgct 480
 tgggtggagga gactcgaatc cacattctac cctccctcaa tectgatggc tatgagaagg 540
 cctatgaagg aggttccgag ttgggagggt ggtccctggg acgttggacc catgatggca 600
 tcgatatcaa caacaacttt ccggatttaa actcgtgctg ctgggaggca gaggaccagc 660
 agaatgcccc aaggaagggt cccaaccact acattgccat ccctgagtgg tttctgtctg 720
 agaatgccac agtggccaca gagaccagag ccgtcatcgc ctggatggag aagatcccgt 780
 ttgtgctggg aggcaacctc caggggggtg agctggctgt ggcatacccc tatgacatgg 840
 tgcggtccct gtggaagacc caggagcaca ccccaacacc tgatgatcat gtgttccgct 900
 ggctggcgta ttcctacgcc tccactcacc gcctcatgac agatgccagg aggcgagtgt 960
 gccacacgga agattttcag aaggaggagg gcaccgtcaa tggggcttcc tggcacacag 1020
 tggctggaag tctaaacgat ttcagctacc tccatacaaa ctgctttgag ctgtccatct 1080
 acgtgggctg tgataaatac ccacacgaga gcgagctgcc ggaggaatgg gagaataacc 1140
 gggagtctct gattgtgttc atggagcagg ttcacgagg catcaaaggc atagtgaag 1200
 atttacaagg gaaagggatt tcaaagtctg tcatctctgt ggaaggtgtt aaccatgaca 1260
 tccggacagc cagcgatggg gattactggc gtctactgaa ccctggcgaa tatgtggtca 1320
 cagccaaggc ggaaggcttt atcacttcca ccaagaactg catggttggc tatgatattg 1380
 gagctactcg gtgtgacttc accctcaca agaccaacct ggctaggata agaaaaatta 1440
 tggagacatt tgggaagcag cctgtcagcc taccctccag gcgctgaag ctgcggggac 1500
 ggaaaaggcg gcagcgtggg tgaccctgtc ggacacttga gacatacccc agaccgtgca 1560
 aataaaaaat cactccagta gtaactctgt agcaggcttt ccctgttgtt ttgactgtaa 1620
 ttcaagagac actcaggagc atacctgcat ggcttggctg accccaaagg ggagggctgg 1680
 tggctcaggg tgttttggg tttgtttttt gtttttctct ttgttctcat ttatccaaat 1740
 accttgaaca gaggcagcaga gaaaggccgg tggcagtgag ggaattaatt cagtgaagtca 1800
 gtctgagatt ctaaaaaggg tgcttgacca ctggccagga agggaaatca ggccttcccc 1860
 catttgctg acattcaagc tcccagtgcc atttgcaagt ggcacagttg acattgcagc 1920
 acccagggaa tcttttgccc cagatgttat catttgagat gctcttatgc agcctaagaa 1980
 aatccatcct ctctggcccc aggggacaag ccaagctgct atgtacacac tcggtgttct 2040
 attgacaata gaggcattta ttaccaagtg tgcctcctag agcagacaga agtgagagc acccaagaat 2100
 cctttttcca acaaaagctt tcttcctaa agcagacaga agtgagagc acccaagaat 2160
 gagtgtgagg cagcagaccc tgggggaggg ggcttgctat ccagaaagc ccctaaaccc 2220
 tttgtgctc cattagccct ggggtgagga gagccagaca tgttaggagg ccagagcagt 2280
 cagtcagggc atcttgaaa agaccttgaa ggaagcaaac cctgggttcc ttttgcctca 2340
 gaatgtgaga gctccaagtt ggccccaatc agggaggagg taatgatgaa catacagacg 2400
 gccacatctt gccaatcaag catcatctga tgaaaaagaa agcaatctta ggattacctg 2460
 ggacacgtca gtctgggaga ggtggttgaa tcattgtgta agggaatagt gtatctaata 2520
 tgtgttgatc ctgctgcctt gttgacctgg agagaatgaa acaaaacaa acataaacia 2580
 ataaagcaaa tggtaagatt aaaaaaaaaa aaaaaaaact cgag 2624

<210> 20
 <211> 488
 <212> DNA
 <213> Homo sapien

<400> 20
 ctttcaaccc ggcgtcgccg gctccagccc cgcgcgcccc cacccttgc cctcccggcg 60
 gctccgcagg gtgaggtggc tttgaccccg ggttgcccgg ccagcacgac cgaggaggtg 120
 gctggacagc tggaggatga acggagaagc cgactgcccc acagacctgg aaatggccgc 180
 cccagaggc caagaccgtt ggtcccagga agacatgctg actttgctgg aatgcatgaa 240
 gaacaacct ccatccaatg acagctccca gttcaaaacc acccaaacac acatggaccg 300
 ggaaaaagtt gcattgaaag acttttctgg agacatgtgc aagctcaaat gggtcgagat 360
 ctctaataag gtgaggaagt tccgtacatt gacagaattg atcctcgata ctcaggaaca 420

tgttttaaatt ccttacaaag gcaaaaaatc aagaaacacc ccgacttccc cgagaaagcc 480
cctaaccc 488

<210> 21
<211> 391
<212> DNA
<213> Homo sapien

<400> 21
atggaattgt ggttttctct ttgggatcaa tgggtctcaga aattccagag aagaaagctg 60
tggcgattgc tgatgctttg ggcaaaatcc ctcagacagt cctgtggcgg tacactggaa 120
cccgaccatc gaatcttgcg aacaacacga tacttggtca gtggctaccc caaaacgatc 180
tgcttggtca cccaatgacc cgtgccttta tcacccatgc tagtcccat ggtgttaatg 240
aaagcatatg caatggcggt cccatgggtga tgataccctt atttggtgat cagatggaca 300
atgcaaaagcg cagggagact aaggagactg gactgaccct gaatgttctg gagatgactt 360
ctgaagatct agaagatgct ctgaagagca g 391

<210> 22
<211> 1320
<212> DNA
<213> Homo sapien

<400> 22
aatctgctgg gaatttcttg ggttgacagc tcttggatcc ctattttgaa cagtggtagt 60
gtcctggatt acttttcaga aagaagtaat cctttttatg acagaacatg taataatgaa 120
gtggtcaaaa tgcagaggct aacattagaa cacttgaatc agatggttg aatcgagtac 180
atccttttgc atgctcaaga gccattctt ttcattcattc ggaagcaaca gcggcagtc 240
cctgcccagg ttatccact agctgattac tatatcattg ctggagtgat ctatcaggca 300
ccagacttgg gatcagttat aaactctaga gtgcttactg cagtgcattg tattcagtca 360
gcttttgatg aagctatgtc atactgtcga tatcatcctt ccaaagggtg ttggtggcac 420
ttcaaagatc atgaagagca agataaagtc agacctaag ccaaagggtg ttggtggcac 480
agctctatct ttccagagaca acgtgtggat gctttacttt tagacctcag acaaaaattt 540
ccacccaaat ttgtgcagct aaagcctgga gaaaagcctg ttccagtggg tcaaacaaag 600
aaagaggcag aacctatacc agaaactgta aaacctgagg agaaggagac cacaagaat 660
gtacaacaga cagtgagtgc taaaggcccc cctgaaaaac ggatgagact tcagttagta 720
ctggacaaaa gagaagcctg gaagactcct catgctagtt atcatacctc agtactgtgg 780
ctcttgagct ttgaagtact ttattgtaac cttcttattt gtatggaatg cgtttatctt 840
ttgaaaggat attaggccgg atgtggtggc tcacgcctgt aatcccagca ctttgggagg 900
ccatggcggg tggatcactt gaggtcagaa gttcaagacc agcctgacca atatggtgaa 960
accccgcttc tactaaaaat acaaaaatta gccgggcgtg gtggcgggag cccatagtcc 1020
cagctactcg ggaggctgag acaggagact tgcttgaacc cgggaggtgg aggttgccct 1080
gagctgatca tcctgctgtt gcaactccagc ttgggcgaaa gagcgagact ttgtctctat 1140
aaagaaggaa agatattatt cccatcatga tttcttgtga atatttgtaa tatgtttttt 1200
gtaacctttc ctttcccgga cttgagcaac ctacacactc acatgtttta ttgtagatat 1260
gttttaaagc aagataaagg tattggtttt aaaaaaaaaa aaaaaaaaaa aaaactcgag 1320

<210> 23
<211> 633
<212> DNA
<213> Homo sapien

<400> 23
ctaagggcag tgaaggtgaa aaccctctca cgggtcccag gagggagaag gaaggcatgc 60
tgatgggggt taagccgggg gaggacgcat cggggcctgc tgaagacctt gtgagaagat 120

ctgagaaaga	tactgcagct	gttgtctcca	gacagggcag	ctccctgaac	ctctttgaag	180
atgtgcagat	cacagaacca	gaagctgagc	cagagtccaa	gtctgaaccg	agacctccaa	240
tttcctctcc	gagggctccc	cagaccagag	ctgtcaagcc	ccgacttcat	cctgtgaagc	300
caatgaatgc	cacggccacc	aaggttgcta	actgcagctt	gggaactgcc	accatcatcg	360
gtgagaactt	gaacaatgag	gtcatgatga	agaaatacag	cccctcggac	cctgcatttg	420
catatgcgca	gctgacccac	gatgagctga	ttcagctggg	cctcaaacag	aaggaaacga	480
taagcaagaa	ggagttccag	gtccgcgagc	tggaagacta	cattgacaac	ctgctcgtca	540
gggtcatgga	agaaaccccc	aatatcctcc	gcataccgac	tcaggttggc	aaaaaagcag	600
gaaagatgta	aattagcaga	aaaaaaactc	gag			633

<210> 24

<211> 1328

<212> DNA

<213> Homo sapien

<400> 24

gtaaacgctc	tcggaattat	ggcggcggtg	gatatccgag	acaatctgct	gggaattttct	60
tgggttgaca	gctcttggtg	ccctattttg	aacagtggta	gtgtcctgga	ttacttttca	120
gaaagaagta	atccttttta	tgacagaaca	tgtaataatg	aagtgggtcaa	aatgcagagg	180
ctaacattag	aacacttgaa	tcagatgggt	ggaatcgagt	acatcctttt	gcatgctcaa	240
gagcccattc	ttttcatcat	tcggaagcaa	cagcggcagt	cccctgcccc	agttatccca	300
ctagctgatt	actatatcat	tgctggagtg	atctatcagg	caccagactt	gggatcagtt	360
ataaaactcta	gagtgcttac	tgcatgcat	ggtattcagt	cagcttttga	tgaagctatg	420
tcatactgtc	gatatcatcc	ttccaaaggg	tattggtggc	acttcaaaga	tcatgaagag	480
caagataaag	tcagaccta	agccaaaagg	aaagaagaac	caagctctat	ttttcagaga	540
caacgtgtgg	atgctttact	tttagacctc	agacaaaaaa	tttccaccca	aatttggtga	600
gtggatcaaa	caaagaaaga	ggcagaacct	ataccagaaa	ctgtaaaacc	tgaggagaag	660
gagaccacaa	agaatgtaca	acagacagtg	agtgtctaa	gccccctga	aaaacggatg	720
agacttcagt	gagtactgga	caaaagagaa	gcctggaaga	ctcctcatgc	tagttatcat	780
acctcagtac	tgtggctctt	gagctttgaa	gtactttatt	gtaaccttct	tatttgatg	840
gaatgogctt	atTTTTTTga	aaggatatta	ggcgggatgt	ggtggctcac	gcctgtaatc	900
ccagcacttt	gggaggccat	ggcgggtgga	tcacttgagg	tcagaagtgc	aagaccagcc	960
tgaccaatat	ggtgaaaccc	cgtctctact	aaaaatacaa	aaattagccg	ggcgtgggtg	1020
cgggcgcccc	tagtcccagc	tactcgggag	gctgagacag	gagacttget	tgaaccggg	1080
aggtggaggt	tgccctgagc	tgattatcat	gctgttgac	tccagcttgg	gcgacagagc	1140
gagactttgt	ctcaaaaaag	aagaaaagat	attattccca	tcattgattt	ttgtgaatat	1200
ttgtgatatg	tcttctgtaa	cctttcctct	cccggacttg	agcaacctac	acactcacat	1260
gtttactggt	agatatgttt	aaaagcaaaa	ttaaggtatt	tgtataaaaa	aaaaaaaaaa	1320
aaactcga						1328

<210> 25

<211> 1758

<212> DNA

<213> Homo sapien

<400> 25

gttttttttt	tttttttttt	aaagagttgc	aacaattcat	ctttatttct	tattttcctc	60
tggagatgca	gaatttggtg	tattttaccc	caagtatatt	tgggatagtt	ggctcctcgc	120
tgggtcagga	tggctgggtg	ccttctcccc	tggcatggtt	ctcttctctg	cagggcgagg	180
ggcagggagc	tagtaaaacc	tcgcaatgac	agccgcaatg	gcagacccaa	tggagcccag	240
gatgaacttg	gtcaatccgg	agagtccagt	tgctcccagt	gactgcagag	tagccacaag	300
gctgcccag	gcaactccac	ccccattggc	aatggccgcc	gcggacatca	tcttggtctg	360
tatggaggac	gaggcgattc	ccgcccagtg	gaagcccatg	gcactgagtg	gcgccgggtg	420
atatccgaga	caatctgctg	ggaatttctt	gggttgacag	ctcttggtac	cctattttga	480

acagtggtag tgtcctggat tacttttcag aaagaagtaa tcctttttat gacagaacat 540
 gtaataatga agtgggtcaaa atgcagaggc taacattaga acacttgaat cagatgggtg 600
 gaatcgagta catccttttg catgctcaag agccattct tttcatcatt cggaagcaac 660
 agcggcagtc ccctgcccaa gttatccac tagctgatta ctatatcatt gctggagtga 720
 tctatcaggc accagacttg ggatcagtta taaactctag agtgcttact gcagtgcag 780
 gtattcagtc agcttttgat gaagctatgt catactgtcg atatcatcct tccaaagggt 840
 attggtggca cttcaaagat catgaagagc aagataaagt cagacctaaa gccaaaagga 900
 aagaagaacc aagctctatt tttcagagac aacgtgtgga tgctttactt ttagacctca 960
 gacaaaaatt tccacccaaa tttgtgcagc taaagcctgg agaaaagcct gttccagtgg 1020
 atcaaaacaaa gaaagaggca gaacctatac cagaaactgt aaaacctgag gagaaggaga 1080
 ccacaaagaa tgtacaacag acagtgagtg cttaaaggccc ccctgaaaaa cggatgagac 1140
 ttcagtgagt actggacaaa agagaagcct ggaagactcc tcatgctagt tatcatacct 1200
 cagtactgtg gctcttgagc tttgaagtac tttattgtaa ccttcttatt tgtatggaat 1260
 gcgcttattt tttgaaagga tattaggccg gatgtgggtg ctcacgcctg taatcccagc 1320
 actttgggag gccatggcgg gtggatcact tgaggtcaga agttcaagac cagcctgacc 1380
 aatatgggtga aaccccgctc ctactaaaaa taaaaaatt agccgggctg ggtggcgggc 1440
 gcccatagtc ccagctactc gggaggctga gacaggagac ttgcttgaac ccgggaggtg 1500
 gaggttgccc tgagctgatt atcatgctgt tgcaactccag cttgggagac agagcgagac 1560
 tttgtctcaa aaaagaagaa aagatattat tcccacatg atttcttgag aatatttggt 1620
 atatgtcttc tgttaccttt cctctcccgg aattgagcaa cctacacact cacatgttta 1680
 ctggtagata tgtttaaaag caaataaagg tattggtata tattgcttca aaaaaaaaaa 1740
 aaaaaaaaaa aactcgag 1758

<210> 26
 <211> 493
 <212> DNA
 <213> Homo sapien

<400> 26
 gaggcgagcg gcagggcctg gtggcgagag cgcggctgtc actgcgcccg agcatcccag 60
 agctttccga gcggacgagc cggccgtgcc gggcatcccc agcctcgcta ccctcgagc 120
 acacgtcgag ccccgacag gcaagggtcc ggaacttagc ccaaagcagc tttccctgg 180
 cagcgcagga gacgcccggc cgcgcgccgg cgcagcctcc cctctcctcc tttgttccgg 240
 gggctggcgg ccgctctcct gccagcgtcg ggatctcggc cccgggaggg gggccgtcgg 300
 gcgcagccgc gaagattccg ttggaactga cgcagagccg agtcgagaag atctgggtgc 360
 ccgtggacca caggccctcg ttgccagat cctgtggggc aaagctgacc aactccccg 420
 ccgtcttcgt catggtgggc ctccccgcc cggggcaaga cctacttctc cacgaaagct 480
 tactcgctgc ctc 493

<210> 27
 <211> 1331
 <212> DNA
 <213> Homo sapien

<400> 27
 ggtggatata cgagacaatc tgctgggaat ttcttgggtt gacagctctt ggatccctat 60
 tttgaacagt ggtagtgtcc tggattactt ttcagaaaga agtaatcctt tttatgacag 120
 aacatgtaat aatgaagtgg tcaaaatgca gaggctaaca ttagaacact tgaatcagat 180
 ggttggaatc gagtacatcc ttttgcatgc tcaagagccc attcttttca tcattcggaa 240
 gcaacagcgg cagtccctcg cccaagtatt cccactagct gattactata tcattgctgg 300
 agtgatctat caggcaccag acttgggagc agttataaac tctagagtgc ttactgcagt 360
 gcatggtatt cagtacgctt ttgatgaagc tatgtcatalc tgtcgatatc atccttccaa 420
 agggatttgg tggcacttca aagatcatga agagcaagat aaagtccagc ctaaagccaa 480
 aaggaaagaa gaaccaagct ctatttttca gagaccaacgt gtggatgctt tactttttaga 540

cctcagacaa	aaatttccac	ccaaatttgt	gcagctaaag	cctggagaaa	agcctgttcc	600
agtggatcaa	acaaagaaa	aggcagaacc	tataccagaa	actgtaaaac	ctgaggagaa	660
ggagaccaca	aagaatgtac	aacagacagt	gagtgtctaa	ggccccctg	aaaaacggat	720
gagacttcag	tgagtactgg	acaaaagaga	agcctggaag	actcctcatg	ctagttatca	780
tacctcagta	ctgtggctct	tgagctttga	agtactttat	tgtaaccttc	ttatttgtat	840
ggaatgcgct	tattttttga	aaggatatta	ggcgggatgt	ggtgggtcac	gcctgtaatc	900
ccagcacttt	gggaggccat	ggcgggtgga	tcacttgagg	tcagaagttc	aagaccagcc	960
tgaccaatat	ggtgaaaccc	cgtctctact	aaaaatacaa	aaattagccg	ggcgtgggtg	1020
cgggcgccca	tagtcccagc	tactcgggag	gctgagacag	gagacttgct	tgaaccggg	1080
aggtggaggt	tgccctgagc	tgattatcat	gctgttgac	tccagcttgg	gcgacagagc	1140
gagactttgt	ctcaaaaaa	gaagaaaaga	tattattccc	atcatgattt	cttgtgaata	1200
tttgttatat	gtcttctgta	acctttcttc	tcccggactt	gagcaacctc	cacactcaca	1260
tgtttactgg	tagatatgtt	taaaagcaaa	ataaagggtat	tggtataaaa	aaaaaaaaa	1320
aaaaactoga	g					1331

<210> 28

<211> 1333

<212> DNA

<213> Homo sapien

<400> 28

cgggcggtgga	tatccgagac	aatctgctgg	gaatttcttg	ggttgacagc	tcttggtacc	60
ctattttgaa	cagtggtagt	gtcctggatt	acttttcaga	aagaagtaat	cctttttatg	120
acagaacatg	taataatgaa	gtggtcaaaa	tgcagaggct	aacattagaa	cacttgaatc	180
agatggttgg	aatcgagtac	atccttttgc	atgctcaaga	gcccattctt	ttcatcattc	240
ggaagcaaca	gcggcagtc	cctgcccag	ttatcccact	agctgattac	tatatcattg	300
ctggagtgat	ctatcaggca	ccagacttgg	gatcagttat	aaactctaga	gtgcttactg	360
cagtgcattg	tattcagtca	gcttttgatg	aagctatgtc	atactgtcga	tatcatcctt	420
ccaaagggtg	ttggtggcac	ttcaaagatc	atgaagagca	agataaagtc	agacctaaag	480
ccaaaaggaa	agaagaacca	agctctattt	ttcagagaca	acgtgtggat	gctttacttt	540
tagacctcag	acaaaaattt	ccacccaaat	ttgtgcagct	aaagcctgga	gaaaagcctg	600
ttccagtggg	tcaaacaaa	aaagaggcag	aacctatacc	agaaactgta	aaacctgagg	660
agaaggagac	cacaaagaat	gtacaacaga	cagtggatgc	taaaggcccc	cctgaaaaac	720
ggatgagact	tcagttagta	ctggacaaaa	gagaagcctg	gaagactcct	catgctagtt	780
atcatacctc	agtactgtgg	ctcttgagct	ttgaagtact	ttattgtaac	cttcttattt	840
gtatggaatg	cgcttatttt	ttgaaaggat	attaggccgg	atgtgggtgc	tcacgcctgt	900
aatcccagca	ctttggggag	ccatggcggg	tggtacactt	gaggtcagaa	gttcaagacc	960
agcctgacca	atatggtgaa	accccgcttc	tactaaaaat	acaaaaatta	gccgggcgtg	1020
gtggcggggc	cccatagtcc	cagctactcg	ggaggctgag	acaggagact	tgcttgaacc	1080
cgggagggtg	agggtgccct	gagctgatta	tcagtctgtt	gcactccagc	ttgggcgaca	1140
gagcgagact	ttgtctcaaa	aaagaagaaa	agatattatt	cccatcatga	tttcttgtga	1200
atatttgtga	tatgtcttct	gtaacctttc	ctctcccggg	cttgagcaac	ctacacactc	1260
acatgtttac	tggtagatat	gtttaaaagc	aaaataaagg	tatttgtata	aaaaaaaaa	1320
aaaaaaactc	gag					1333

<210> 29

<211> 813

<212> DNA

<213> Homo sapien

<400> 29

ctgagctgca	cttcagcgaa	ttcacctcgg	ctgtggctga	catgaagaac	tccgtggcgg	60
accgagacaa	cagccccagc	tcctgtgctg	gcctcttcat	tgcttcacac	atcgggtttg	120
actggccccg	ggtctgggtc	cacctggaca	tcgctgctcc	agtgcattgt	ggcgagcgag	180

ccacaggctt tgggggtggct ctcctactgg ctctttttgg ccgtgcctcc gaggaccgcg 240
 tgctgaacct ggtatccccg ctggactgtg aggtggatgc ccaggaaggc gacaacatgg 300
 ggcgtgactc caagagacgg aggtcgtgtg gagggtact tcccagctgg tgacacaggg 360
 ttccttacct cattttgcac tgactgattt taagcaattg aaagattaac taactcttaa 420
 gatgagtttg gcttctcctt ctgtgcccag tggtgacagg agtgagccat tcttctctta 480
 gaagcagctt aggggcttgg tggggctctg agaaaattgt cacagacccc ataggtctcc 540
 atctgtaagc tctgtccctt gtcctccacc ctggtcttta gagccacctc aggtcaccct 600
 ctgtagtgag tgtacttctt gaccagggcc cttgtctcaag ctggggctcc ctgggggtgc 660
 taaccagccc tgggtagatg tgactggctg ttagggaccc cattctgtga agcaggagac 720
 cctcacagct cccaccaacc cccagttcac ttgaagttga attaaatatg gccacaacat 780
 aaaaaaaaaa aaaaaaaaaa aaaaaaactc gag 813

<210> 30
 <211> 1316
 <212> DNA
 <213> Homo sapien

<400> 30
 caggcgccca gtcattggccc aagagacagc accaccgtgt ggcccagctc caaggggtga 60
 cagtcacaatc atagaaaaaga tggaaaaaag gacatgtgcc ctgtgccctg aaggccacga 120
 gtggagtcaa atatactttt caccatcagg aaatatagtt gctcatgaaa actggttgct 180
 gtattcatca ggactggtgg agtgtgagac tcttgatcta cgtaatacaa ttagaaactt 240
 tgatgtcaaa tctgtaaaaga aagagatctg gagaggaaga agattgaaat gctcattctg 300
 taacaaagga ggcgccaccg tgggggtgtga tttatggttc tgtaagaaga gttaccacta 360
 tgtctgtgcc aaaaaggacc aagcaattct tcaagttgat ggaaaccatg gaacttaca 420
 attattttgc ccagaacatt ctccagaaca agaagaggcc actgaaagtg ctgatgacc 480
 aagcatgaag aagaagagag gaaaaaaca acgcctctca tcaggccctc ctgcacagcc 540
 aaaaacgatg aaatgtagta acgcaaaaag acatatgaca gaagagcctc atggtcacac 600
 agatgcagct gtcaaatctc cttttcttaa gaaatgccag gaagcaggac ttcttactga 660
 actatttgaa cacatactag aaaatatgga ttcagttcat ggaagacttg tggatgagac 720
 tgcctcagag tgggactatg aagggatcga gaccttactg tttgactgtg gattatttaa 780
 agacacacta agaaaattcc aagaagtaat caagagtaaa gcttgtgaat gggaagaaag 840
 gcaaaggcag atgaagcagc agcttgaggc acttgacagc ttacaacaaa gcttgtgctc 900
 atttcaagaa aatggggacc tggactgctc aagttctaca tcaggatcct tgctacctcc 960
 tgaggaccac cagtaaaaagc tgttccctcag gaaaactgga tggggcctcc atgttctcca 1020
 aggatcgagg aagtcttctt gcctaccctg cccaccccag tcaagggcag caacaccaga 1080
 gctttgtctc gccttaaatg gaatcttaga gctttctctt gcttctgcta ctctacaga 1140
 tggcctcatc atgggtctcca ctacagtatta ataactccat cagcatagag caaactcaac 1200
 actgtgcatt gcacactgtt accatgggtt tatgtctact atcatatcac attgccaata 1260
 tttagcacac ttaataaatg cttgtcaaaa cccaaaaaaa aaaaaaaaaa ctcgag 1316

<210> 31
 <211> 1355
 <212> DNA
 <213> Homo sapien

<400> 31
 cggcggtgga tatccgagac aatctgctgg gaatttcttg ggttgacagc tcttgatcc 60
 ctattttgaa cagtggtagt gtcttgatt acttttcaga aagaagtaat cctttttatg 120
 acagaacatg taataatgaa gtggtcaaaa tgcagaggct aacattagaa cacttgaatc 180
 agatgggttg aatcgagtac atccttttgc atgctcaaga gccattctt ttcattcattc 240
 ggaagcaaca gcggcagtc cctgcccagg ttatcccact agctgattac tatatcattg 300
 ctggagtgat ctatcaggca ccagacttgg gatcagttat aaactctaga gtgcttactg 360
 cagtgcatgg tattcagtca gcttttgatg aagctatgct atactgtcga tatcatcctt 420

```

ccaaaagggtta ttggtggcac ttcaaagatc atgaagagca agataaagtc agacctaaag 480
ccaaaaggaa agaagaacca agctctatctt ttccagagaca acgtgtggat gctttacttt 540
tagacctcag acaaaaattt ccacccaaat ttgtgcagct aaagcctgga gaaaagcctg 600
ttccagtggga tcaaacaag aaagaggcag aacctatacc agaaactgta aaacctgagg 660
agaaggagac cacaagaat gtacaacaga cagtgaagtc taaaggcccc cctgaaaaac 720
ggatgagact tcagtgaag ctggacaaaa gagaagcctg gaagactcct catgctagtt 780
atcatacctc agtactgtgg ctcttgagct ttgaagtact ttattgtaac cttcttattt 840
gtatggaatg cgcttatttt ttgaaaggat attaggccgg atgtggtggc tcacgcctgt 900
aatcccagca ctttggggagg ccatggcggg tggatcactt gaggtcagaa gttcaagacc 960
agcctgacca atatggtgaa acccgcgtctc tactaaaaat acaaaaatta gccgggctg 1020
gtggcggggcg cccatagtcg cagctactcg ggaggctgag acaggagact tgcttgaacc 1080
cgggagggtgg aggttgccct gagctgatta tcatgctgtt gcactccagc ttgggcgaca 1140
gaacgagact ttgtctcaaa aaaagaagaa aagatattat tcccatcatg atttcttg 1200
aatatttgtt atatgtcttc tggtaacctt tcctctcccg gacttgaagc aacctcacac 1260
actcacatgt ttactggtag atatgtttta aaagcaaaat aaaggtattt gtttttccaa 1320
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa tcgag 1355

```

<210> 32
 <211> 80
 <212> PRT
 <213> Homo sapien

<400> 32
 Val Ser Arg Ile Arg Gly Gly Ala Lys Lys Arg Lys Lys Lys Ser Tyr
 1 5 10 15
 Thr Thr Pro Lys Lys Asp Lys His Gln Arg Lys Lys Val Gln Pro Ala
 20 25 30
 Val Leu Lys Tyr Tyr Lys Val Asp Glu Asn Gly Lys Ile Ser Cys Leu
 35 40 45
 Arg Arg Glu Cys Pro Ser Asp Glu Cys Gly Ala Gly Val Phe Met Ala
 50 55 60
 Ser His Phe Asp Arg His Tyr Cys Gly Lys Cys Cys Leu Thr His Cys
 65 70 75 80

<210> 33
 <211> 130
 <212> PRT
 <213> Homo sapien

<400> 33
 Glu Ile Ser Asn Glu Val Arg Lys Phe Arg Thr Leu Thr Glu Leu Ile
 1 5 10 15
 Leu Asp Ala Gln Glu His Val Lys Asn Pro Tyr Lys Gly Lys Lys Leu
 20 25 30
 Lys Lys His Pro Asp Phe Pro Lys Lys Pro Leu Thr Pro Tyr Phe Arg
 35 40 45
 Phe Phe Met Glu Lys Arg Ala Lys Tyr Ala Lys Leu His Pro Gln Met
 50 55 60
 Ser Asn Leu Asp Leu Thr Lys Ile Leu Ser Lys Lys Tyr Lys Glu Leu
 65 70 75 80
 Pro Glu Lys Lys Lys Met Lys Tyr Val Pro Asp Phe Gln Arg Arg Glu
 85 90 95
 Thr Gly Val Arg Ala Lys Pro Gly Pro Ile Gln Gly Gly Ser Pro Pro
 100 105 110

Pro Tyr Pro Glu Cys Gln Glu Ser Asp Ile Pro Glu Lys Pro Gln Asp
115 120 125

Pro Pro
130

<210> 34
<211> 506
<212> PRT
<213> Homo sapien

<400> 34
Asn Ser Glu Lys Glu Ile Pro Val Leu Asn Glu Leu Pro Val Pro Met
1 5 10 15
Val Ala Arg Tyr Ile Arg Ile Asn Pro Gln Ser Trp Phe Asp Asn Gly
20 25 30
Ser Ile Cys Met Arg Met Glu Ile Leu Gly Cys Pro Leu Pro Asp Pro
35 40 45
Asn Asn Tyr Tyr His Arg Arg Asn Glu Met Thr Thr Thr Asp Asp Leu
50 55 60
Asp Phe Lys His His Asn Tyr Lys Glu Met Arg Gln Leu Met Lys Val
65 70 75 80
Val Asn Glu Met Cys Pro Asn Ile Thr Arg Ile Tyr Asn Ile Gly Lys
85 90 95
Ser His Gln Gly Leu Lys Leu Tyr Ala Val Glu Ile Ser Asp His Pro
100 105 110
Gly Glu His Glu Val Gly Glu Pro Glu Phe His Tyr Ile Ala Gly Ala
115 120 125
His Gly Asn Glu Val Leu Gly Arg Glu Leu Leu Leu Leu Leu His
130 135 140
Phe Leu Cys Gln Glu Tyr Ser Ala Gln Asn Ala Arg Ile Val Arg Leu
145 150 155 160
Val Glu Glu Thr Arg Ile His Ile Leu Pro Ser Leu Asn Pro Asp Gly
165 170 175
Tyr Glu Lys Ala Tyr Glu Gly Gly Ser Glu Leu Gly Gly Trp Ser Leu
180 185 190
Gly Arg Trp Thr His Asp Gly Ile Asp Ile Asn Asn Asn Phe Pro Asp
195 200 205
Leu Asn Ser Leu Leu Trp Glu Ala Glu Asp Gln Gln Asn Ala Pro Arg
210 215 220
Lys Val Pro Asn His Tyr Ile Ala Ile Pro Glu Trp Phe Leu Ser Glu
225 230 235 240
Asn Ala Thr Val Ala Thr Glu Thr Arg Ala Val Ile Ala Trp Met Glu
245 250 255
Lys Ile Pro Phe Val Leu Gly Gly Asn Leu Gln Gly Gly Glu Leu Val
260 265 270
Val Ala Tyr Pro Tyr Asp Met Val Arg Ser Leu Trp Lys Thr Gln Glu
275 280 285
His Thr Pro Thr Pro Asp Asp His Val Phe Arg Trp Leu Ala Tyr Ser
290 295 300
Tyr Ala Ser Thr His Arg Leu Met Thr Asp Ala Arg Arg Arg Val Cys
305 310 315 320
His Thr Glu Asp Phe Gln Lys Glu Glu Gly Thr Val Asn Gly Ala Ser
325 330 335
Trp His Thr Val Ala Gly Ser Leu Asn Asp Phe Ser Tyr Leu His Thr

Asn Cys Phe Glu Leu Ser Ile Tyr Val Gly Cys Asp Lys Tyr Pro His
 340 345 350
 355 360 365
 Glu Ser Glu Leu Pro Glu Glu Trp Glu Asn Asn Arg Glu Ser Leu Ile
 370 375 380
 Val Phe Met Glu Gln Val His Arg Gly Ile Lys Gly Ile Val Arg Asp
 385 390 395 400
 Leu Gln Gly Lys Gly Ile Ser Asn Ala Val Ile Ser Val Glu Gly Val
 405 410 415
 Asn His Asp Ile Arg Thr Ala Ser Asp Gly Asp Tyr Trp Arg Leu Leu
 420 425 430
 Asn Pro Gly Glu Tyr Val Val Thr Ala Lys Ala Glu Gly Phe Ile Thr
 435 440 445
 Ser Thr Lys Asn Cys Met Val Gly Tyr Asp Met Gly Ala Thr Arg Cys
 450 455 460
 Asp Phe Thr Leu Thr Lys Thr Asn Leu Ala Arg Ile Arg Glu Ile Met
 465 470 475 480
 Glu Thr Phe Gly Lys Gln Pro Val Ser Leu Pro Ser Arg Arg Leu Lys
 485 490 495
 Leu Arg Gly Arg Lys Arg Arg Gln Arg Gly
 500 505

<210> 35
 <211> 96
 <212> PRT
 <213> Homo sapien

<400> 35
 Met Asn Gly Glu Ala Asp Cys Pro Thr Asp Leu Glu Met Ala Ala Pro
 1 5 10 15
 Arg Gly Gln Asp Arg Trp Ser Gln Glu Asp Met Leu Thr Leu Leu Glu
 20 25 30
 Cys Met Lys Asn Asn Leu Pro Ser Asn Asp Ser Ser Gln Phe Lys Thr
 35 40 45
 Thr Gln Thr His Met Asp Arg Glu Lys Val Ala Leu Lys Asp Phe Ser
 50 55 60
 Gly Asp Met Cys Lys Leu Lys Trp Val Glu Ile Ser Asn Glu Val Arg
 65 70 75 80
 Lys Phe Arg Thr Leu Thr Glu Leu Ile Leu Asp Thr Gln Glu His Val
 85 90 95

<210> 36
 <211> 129
 <212> PRT
 <213> Homo sapien

<400> 36
 Gly Ile Val Val Phe Ser Leu Gly Ser Met Val Ser Glu Ile Pro Glu
 1 5 10 15
 Lys Lys Ala Val Ala Ile Ala Asp Ala Leu Gly Lys Ile Pro Gln Thr
 20 25 30
 Val Leu Trp Arg Tyr Thr Gly Thr Arg Pro Ser Asn Leu Ala Asn Asn
 35 40 45
 Thr Ile Leu Val Gln Trp Leu Pro Gln Asn Asp Leu Leu Gly His Pro


```
<210> 37
<211> 238
<212> PRT
<213> Homo sapien
```

```
<210> 38
<211> 202
<212> PRT
<213> Homo sapien
```

<400> 38
 Lys Gly Ser Glu Gly Glu Asn Pro Leu Thr Val Pro Gly Arg Glu Lys
 1 5 10 15
 Glu Gly Met Leu Met Gly Val Lys Pro Gly Glu Asp Ala Ser Gly Pro
 20 25 30
 Ala Glu Asp Leu Val Arg Arg Ser Glu Lys Asp Thr Ala Ala Val Val
 35 40 45
 Ser Arg Gln Gly Ser Ser Leu Asn Leu Phe Glu Asp Val Gln Ile Thr
 50 55 60
 Glu Pro Glu Ala Glu Pro Glu Ser Lys Ser Glu Pro Arg Pro Pro Ile
 65 70 75 80
 Ser Ser Pro Arg Ala Pro Gln Thr Arg Ala Val Lys Pro Arg Leu His
 85 90 95
 Pro Val Lys Pro Met Asn Ala Thr Ala Thr Lys Val Ala Asn Cys Ser
 100 105 110
 Leu Gly Thr Ala Thr Ile Ile Gly Glu Asn Leu Asn Asn Glu Val Met
 115 120 125
 Met Lys Lys Tyr Ser Pro Ser Asp Pro Ala Phe Ala Tyr Ala Gln Leu
 130 135 140
 Thr His Asp Glu Leu Ile Gln Leu Val Leu Lys Gln Lys Glu Thr Ile
 145 150 155 160
 Ser Lys Lys Glu Phe Gln Val Arg Glu Leu Glu Asp Tyr Ile Asp Asn
 165 170 175
 Leu Leu Val Arg Val Met Glu Glu Thr Pro Asn Ile Leu Arg Ile Pro
 180 185 190
 Thr Gln Val Gly Lys Lys Ala Gly Lys Met
 195 200

<210> 39
 <211> 243
 <212> PRT
 <213> Homo sapien

<400> 39
 Val Asn Ala Leu Gly Ile Met Ala Ala Val Asp Ile Arg Asp Asn Leu
 1 5 10 15
 Leu Gly Ile Ser Trp Val Asp Ser Ser Trp Ile Pro Ile Leu Asn Ser
 20 25 30
 Gly Ser Val Leu Asp Tyr Phe Ser Glu Arg Ser Asn Pro Phe Tyr Asp
 35 40 45
 Arg Thr Cys Asn Asn Glu Val Val Lys Met Gln Arg Leu Thr Leu Glu
 50 55 60
 His Leu Asn Gln Met Val Gly Ile Glu Tyr Ile Leu Leu His Ala Gln
 65 70 75 80
 Glu Pro Ile Leu Phe Ile Ile Arg Lys Gln Gln Arg Gln Ser Pro Ala
 85 90 95
 Gln Val Ile Pro Leu Ala Asp Tyr Tyr Ile Ile Ala Gly Val Ile Tyr
 100 105 110
 Gln Ala Pro Asp Leu Gly Ser Val Ile Asn Ser Arg Val Leu Thr Ala
 115 120 125
 Val His Gly Ile Gln Ser Ala Phe Asp Glu Ala Met Ser Tyr Cys Arg
 130 135 140
 Tyr His Pro Ser Lys Gly Tyr Trp Trp His Phe Lys Asp His Glu Glu
 145 150 155 160

Gln Asp Lys Val Arg Pro Lys Ala Lys Arg Lys Glu Glu Pro Ser Ser
 165 170 175
 Ile Phe Gln Arg Gln Arg Val Asp Ala Leu Leu Leu Asp Leu Arg Gln
 180 185 190
 Lys Ile Ser Thr Gln Ile Cys Ala Val Asp Gln Thr Lys Lys Glu Ala
 195 200 205
 Glu Pro Ile Pro Glu Thr Val Lys Pro Glu Glu Lys Glu Thr Thr Lys
 210 215 220
 Asn Val Gln Gln Thr Val Ser Ala Lys Gly Pro Pro Glu Lys Arg Met
 225 230 235 240
 Arg Leu Gln

<210> 40
 <211> 245
 <212> PRT
 <213> Homo sapien

<400> 40
 Ala Ala Val Asp Ile Arg Asp Asn Leu Leu Gly Ile Ser Trp Val Asp
 1 5 10 15
 Ser Ser Trp Ile Pro Ile Leu Asn Ser Gly Ser Val Leu Asp Tyr Phe
 20 25 30
 Ser Glu Arg Ser Asn Pro Phe Tyr Asp Arg Thr Cys Asn Asn Glu Val
 35 40 45
 Val Lys Met Gln Arg Leu Thr Leu Glu His Leu Asn Gln Met Val Gly
 50 55 60
 Ile Glu Tyr Ile Leu Leu His Ala Gln Glu Pro Ile Leu Phe Ile Ile
 65 70 75 80
 Arg Lys Gln Gln Arg Gln Ser Pro Ala Gln Val Ile Pro Leu Ala Asp
 85 90 95
 Tyr Tyr Ile Ile Ala Gly Val Ile Tyr Gln Ala Pro Asp Leu Gly Ser
 100 105 110
 Val Ile Asn Ser Arg Val Leu Thr Ala Val His Gly Ile Gln Ser Ala
 115 120 125
 Phe Asp Glu Ala Met Ser Tyr Cys Arg Tyr His Pro Ser Lys Gly Tyr
 130 135 140
 Trp Trp His Phe Lys Asp His Glu Glu Gln Asp Lys Val Arg Pro Lys
 145 150 155 160
 Ala Lys Arg Lys Glu Glu Pro Ser Ser Ile Phe Gln Arg Gln Arg Val
 165 170 175
 Asp Ala Leu Leu Leu Asp Leu Arg Gln Lys Phe Pro Pro Lys Phe Val
 180 185 190
 Gln Leu Lys Pro Gly Glu Lys Pro Val Pro Val Asp Gln Thr Lys Lys
 195 200 205
 Glu Ala Glu Pro Ile Pro Glu Thr Val Lys Pro Glu Glu Lys Glu Thr
 210 215 220
 Thr Lys Asn Val Gln Gln Thr Val Ser Ala Lys Gly Pro Pro Glu Lys
 225 230 235 240
 Arg Met Arg Leu Gln
 245

<210> 41
 <211> 163

<212> PRT

<213> Homo sapien

<400> 41

Gly Glu Arg Gln Gly Leu Val Ala Arg Ala Arg Leu Ser Leu Arg Pro
 1 5 10 15
 Ser Ile Pro Glu Leu Ser Glu Arg Thr Ser Arg Pro Cys Arg Ala Ser
 20 25 30
 Pro Ala Ser Leu Pro Ser Gln His Thr Ser Ser Pro Ala Gln Ala Arg
 35 40 45
 Val Arg Asn Leu Ala Gln Ser Thr Phe Pro Leu Ala Ala Gln Glu Thr
 50 55 60
 Pro Gly Arg Ala Pro Ala His Ala Pro Leu Ser Ser Phe Val Pro Gly
 65 70 75 80
 Val Gly Gly Arg Ser Pro Ala Ser Val Gly Ile Ser Ala Pro Gly Gly
 85 90 95
 Gly Pro Ser Gly Ala Ala Ala Lys Ile Pro Leu Glu Leu Thr Gln Ser
 100 105 110
 Arg Val Gln Lys Ile Trp Val Pro Val Asp His Arg Pro Ser Leu Pro
 115 120 125
 Arg Ser Cys Gly Pro Lys Leu Thr Asn Ser Pro Ala Val Phe Val Met
 130 135 140
 Val Gly Leu Pro Arg Pro Gly Gln Asp Leu Leu Leu His Glu Ser Leu
 145 150 155 160
 Leu Ala Ala

<210> 42

<211> 243

<212> PRT

<213> Homo sapien

<400> 42

Val Asp Ile Arg Asp Asn Leu Leu Gly Ile Ser Trp Val Asp Ser Ser
 1 5 10 15
 Trp Ile Pro Ile Leu Asn Ser Gly Ser Val Leu Asp Tyr Phe Ser Glu
 20 25 30
 Arg Ser Asn Pro Phe Tyr Asp Arg Thr Cys Asn Asn Glu Val Val Lys
 35 40 45
 Met Gln Arg Leu Thr Leu Glu His Leu Asn Gln Met Val Gly Ile Glu
 50 55 60
 Tyr Ile Leu Leu His Ala Gln Glu Pro Ile Leu Phe Ile Ile Arg Lys
 65 70 75 80
 Gln Gln Arg Gln Ser Pro Ala Gln Val Ile Pro Leu Ala Asp Tyr Tyr
 85 90 95
 Ile Ile Ala Gly Val Ile Tyr Gln Ala Pro Asp Leu Gly Ser Val Ile
 100 105 110
 Asn Ser Arg Val Leu Thr Ala Val His Gly Ile Gln Ser Ala Phe Asp
 115 120 125
 Glu Ala Met Ser Tyr Cys Arg Tyr His Pro Ser Lys Gly Tyr Trp Trp
 130 135 140
 His Phe Lys Asp His Glu Glu Gln Asp Lys Val Arg Pro Lys Ala Lys
 145 150 155 160
 Arg Lys Glu Glu Pro Ser Ser Ile Phe Gln Arg Gln Arg Val Asp Ala

165 170 175
 Leu Leu Leu Asp Leu Arg Gln Lys Phe Pro Pro Lys Phe Val Gln Leu
 180 185 190
 Lys Pro Gly Glu Lys Pro Val Pro Val Asp Gln Thr Lys Lys Glu Ala
 195 200 205
 Glu Pro Ile Pro Glu Thr Val Lys Pro Glu Glu Lys Glu Thr Thr Lys
 210 215 220
 Asn Val Gln Gln Thr Val Ser Ala Lys Gly Pro Pro Glu Lys Arg Met
 225 230 235 240
 Arg Leu Gln

<210> 43
 <211> 244
 <212> PRT
 <213> Homo sapien

<400> 43
 Ala Val Asp Ile Arg Asp Asn Leu Leu Gly Ile Ser Trp Val Asp Ser
 1 5 10 15
 Ser Trp Ile Pro Ile Leu Asn Ser Gly Ser Val Leu Asp Tyr Phe Ser
 20 25 30
 Glu Arg Ser Asn Pro Phe Tyr Asp Arg Thr Cys Asn Asn Glu Val Val
 35 40 45
 Lys Met Gln Arg Leu Thr Leu Glu His Leu Asn Gln Met Val Gly Ile
 50 55 60
 Glu Tyr Ile Leu Leu His Ala Gln Glu Pro Ile Leu Phe Ile Ile Arg
 65 70 75 80
 Lys Gln Gln Arg Gln Ser Pro Ala Gln Val Ile Pro Leu Ala Asp Tyr
 85 90 95
 Tyr Ile Ile Ala Gly Val Ile Tyr Gln Ala Pro Asp Leu Gly Ser Val
 100 105 110
 Ile Asn Ser Arg Val Leu Thr Ala Val His Gly Ile Gln Ser Ala Phe
 115 120 125
 Asp Glu Ala Met Ser Tyr Cys Arg Tyr His Pro Ser Lys Gly Tyr Trp
 130 135 140
 Trp His Phe Lys Asp His Glu Glu Gln Asp Lys Val Arg Pro Lys Ala
 145 150 155 160
 Lys Arg Lys Glu Glu Pro Ser Ser Ile Phe Gln Arg Gln Arg Val Asp
 165 170 175
 Ala Leu Leu Leu Asp Leu Arg Gln Lys Phe Pro Pro Lys Phe Val Gln
 180 185 190
 Leu Lys Pro Gly Glu Lys Pro Val Pro Val Asp Gln Thr Lys Lys Glu
 195 200 205
 Ala Glu Pro Ile Pro Glu Thr Val Lys Pro Glu Glu Lys Glu Thr Thr
 210 215 220
 Lys Asn Val Gln Gln Thr Val Ser Ala Lys Gly Pro Pro Glu Lys Arg
 225 230 235 240
 Met Arg Leu Gln

<210> 44
 <211> 109
 <212> PRT

<213> Homo sapien

<400> 44
 Glu Leu His Phe Ser Glu Phe Thr Ser Ala Val Ala Asp Met Lys Asn
 1 5 10 15
 Ser Val Ala Asp Arg Asp Asn Ser Pro Ser Ser Cys Ala Gly Leu Phe
 20 25 30
 Ile Ala Ser His Ile Gly Phe Asp Trp Pro Gly Val Trp Val His Leu
 35 40 45
 Asp Ile Ala Ala Pro Val His Ala Gly Glu Arg Ala Thr Gly Phe Gly
 50 55 60
 Val Ala Leu Leu Leu Ala Leu Phe Gly Arg Ala Ser Glu Asp Pro Leu
 65 70 75 80
 Leu Asn Leu Val Ser Pro Leu Asp Cys Glu Val Asp Ala Gln Glu Gly
 85 90 95
 Asp Asn Met Gly Arg Asp Ser Lys Arg Arg Arg Leu Val
 100 105

<210> 45

<211> 324

<212> PRT

<213> Homo sapien

<400> 45
 Arg Arg Pro Val Met Ala Gln Glu Thr Ala Pro Pro Cys Gly Pro Val
 1 5 10 15
 Ser Arg Gly Asp Ser Pro Ile Ile Glu Lys Met Glu Lys Arg Thr Cys
 20 25 30
 Ala Leu Cys Pro Glu Gly His Glu Trp Ser Gln Ile Tyr Phe Ser Pro
 35 40 45
 Ser Gly Asn Ile Val Ala His Glu Asn Cys Leu Leu Tyr Ser Ser Gly
 50 55 60
 Leu Val Glu Cys Glu Thr Leu Asp Leu Arg Asn Thr Ile Arg Asn Phe
 65 70 75 80
 Asp Val Lys Ser Val Lys Lys Glu Ile Trp Arg Gly Arg Arg Leu Lys
 85 90 95
 Cys Ser Phe Cys Asn Lys Gly Gly Ala Thr Val Gly Cys Asp Leu Trp
 100 105 110
 Phe Cys Lys Lys Ser Tyr His Tyr Val Cys Ala Lys Lys Asp Gln Ala
 115 120 125
 Ile Leu Gln Val Asp Gly Asn His Gly Thr Tyr Lys Leu Phe Cys Pro
 130 135 140
 Glu His Ser Pro Glu Gln Glu Glu Ala Thr Glu Ser Ala Asp Asp Pro
 145 150 155 160
 Ser Met Lys Lys Lys Arg Gly Lys Asn Lys Arg Leu Ser Ser Gly Pro
 165 170 175
 Pro Ala Gln Pro Lys Thr Met Lys Cys Ser Asn Ala Lys Arg His Met
 180 185 190
 Thr Glu Glu Pro His Gly His Thr Asp Ala Ala Val Lys Ser Pro Phe
 195 200 205
 Leu Lys Lys Cys Gln Glu Ala Gly Leu Leu Thr Glu Leu Phe Glu His
 210 215 220
 Ile Leu Glu Asn Met Asp Ser Val His Gly Arg Leu Val Asp Glu Thr
 225 230 235 240

Ala Ser Glu Ser Asp Tyr Glu Gly Ile Glu Thr Leu Leu Phe Asp Cys
 245 250 255
 Gly Leu Phe Lys Asp Thr Leu Arg Lys Phe Gln Glu Val Ile Lys Ser
 260 265 270
 Lys Ala Cys Glu Trp Glu Glu Arg Gln Arg Gln Met Lys Gln Gln Leu
 275 280 285
 Glu Ala Leu Ala Asp Leu Gln Gln Ser Leu Cys Ser Phe Gln Glu Asn
 290 295 300
 Gly Asp Leu Asp Cys Ser Ser Thr Ser Gly Ser Leu Leu Pro Pro
 305 310 315 320
 Glu Asp His Gln

<210> 46
 <211> 244
 <212> PRT
 <213> Homo sapien

<400> 46
 Ala Val Asp Ile Arg Asp Asn Leu Leu Gly Ile Ser Trp Val Asp Ser
 1 5 10 15
 Ser Trp Ile Pro Ile Leu Asn Ser Gly Ser Val Leu Asp Tyr Phe Ser
 20 25 30
 Glu Arg Ser Asn Pro Phe Tyr Asp Arg Thr Cys Asn Asn Glu Val Val
 35 40 45
 Lys Met Gln Arg Leu Thr Leu Glu His Leu Asn Gln Met Val Gly Ile
 50 55 60
 Glu Tyr Ile Leu Leu His Ala Gln Glu Pro Ile Leu Phe Ile Ile Arg
 65 70 75 80
 Lys Gln Gln Arg Gln Ser Pro Ala Gln Val Ile Pro Leu Ala Asp Tyr
 85 90 95
 Tyr Ile Ile Ala Gly Val Ile Tyr Gln Ala Pro Asp Leu Gly Ser Val
 100 105 110
 Ile Asn Ser Arg Val Leu Thr Ala Val His Gly Ile Gln Ser Ala Phe
 115 120 125
 Asp Glu Ala Met Ser Tyr Cys Arg Tyr His Pro Ser Lys Gly Tyr Trp
 130 135 140
 Trp His Phe Lys Asp His Glu Glu Gln Asp Lys Val Arg Pro Lys Ala
 145 150 155 160
 Lys Arg Lys Glu Glu Pro Ser Ser Ile Phe Gln Arg Gln Arg Val Asp
 165 170 175
 Ala Leu Leu Leu Asp Leu Arg Gln Lys Phe Pro Pro Lys Phe Val Gln
 180 185 190
 Leu Lys Pro Gly Glu Lys Pro Val Pro Val Asp Gln Thr Lys Lys Glu
 195 200 205
 Ala Glu Pro Ile Pro Glu Thr Val Lys Pro Glu Glu Lys Glu Thr Thr
 210 215 220
 Lys Asn Val Gln Gln Thr Val Ser Ala Lys Gly Pro Pro Glu Lys Arg
 225 230 235 240
 Met Arg Leu Gln

<210> 47
 <211> 14

<212> DNA

<213> Homo sapien

<400> 47

14

tttttttttt ttag

<210> 48

<211> 10

<212> DNA

<213> Homo sapien

<400> 48

10

cttcaacctc

<210> 49

<211> 496

<212> DNA

<213> Homo sapien

<400> 49

gcaccatgta	ccgagcactt	cggctcctcg	cgcgctcgcg	tccccctcgtg	cgggctccag	60
ccgcagcctt	agcttcgggt	cccggcttgg	gtggcgcggc	cgtgccctcg	ttttggcctc	120
cgaacgcggc	tcgaatggca	agccaaaatt	ccttcgggat	agaatatgat	acctttgggtg	180
aactaaaggt	gccaaatgat	aagtattatg	gcgcccagac	cgtgagatct	acgatgaact	240
ttaagattgg	agggtgtgaca	gaacgcattg	caaccccagt	tattaaagct	tttggcatct	300
tgaagcgagc	ggccgctgaa	gtaaaccagg	attatggtct	tgatccaaag	attgctaattg	360
caataatgaa	ggcagcagat	gaggtagctg	aaggtaaatt	aaatgatcat	tttcctctcg	420
tggtatggca	gactggatca	ggaactcaga	caaatatgaa	tgtaaatgaa	gtcattagcc	480
aatagagcaa	ttgaaa					496

<210> 50

<211> 499

<212> DNA

<213> Homo sapien

<400> 50

agaaaaagtc	tatgtttgca	gaaatacaga	tccaagacaa	agacaggatg	ggcactgctg	60
gaaaagtatt	taaatgcaaa	gcagctgtgc	tttgggagca	gaagcaaccc	ttctccattg	120
aggaaataga	agttgcccc	ccaaagacta	aagaagttcg	cattaagatt	ttggccacag	180
gaatctgtcg	cacagatgac	catgtgataa	aaggaacaat	ggtgtccaag	tttcagtgga	240
ttgtgggaca	tgaggcaact	gggattgtag	agagcattgg	agaaggagtg	actacagtga	300
aaccaggtga	caaagtcata	cctctctttc	tgccacaatg	tagagaatgc	aatgcttgct	360
gcaaccacga	tggcaacctt	tgcattagga	gcgatattac	tggtcgtgga	gtactggctg	420
atggcaccac	cagatttaca	tgcaaggcgc	aaccagtcca	ccacttcattg	aacaccagta	480
catttaccga	gtacacagt					499

<210> 51

<211> 887

<212> DNA

<213> Homo sapien

<400> 51

gagtcctgagc	agaaaggaaa	agcagccttg	gcagccacgt	tagaggaata	caaagccaca	60
gtggccagtg	accagataga	gatgaatcgc	ctgaaggctc	agctggagaa	tgaaaagcag	120

aaagtggcag	agctgtattc	tatccataac	tctggagaca	aatctgatat	tcaggacctc	180
ctggagagt	tcaggctgga	caaagaaaaa	gcagagactt	tggctagtag	cttgcaggaa	240
gatctggctc	atacccgaaa	tgatgccaat	cgattacagg	atgccattgc	taaggtagag	300
gatgaatacc	gagccttcca	agaagaagct	aagaaacaaa	ttgaagattt	gaatatgacg	360
ttagaaaaat	taagatcaga	cctggatgaa	aaagaaacag	aaaggagtga	catgaaagaa	420
accatctttg	aacttgaaga	tgaagttaga	caacatcgtg	ctgtgaaact	tcattgacaac	480
ctcattatit	ctgatctaga	gaatacagtt	aaaaaactcc	aggaccaaaa	gcacgacatg	540
gaaagagaaa	taaagacact	ccacagaaga	cttcgggaag	aatctgcgga	atggcggcag	600
tttcaggctg	atctccagac	tgcagttagt	attgcaaatg	acattaaatc	tgaagcccaa	660
gaggagattg	gtgatctaaa	gcgccggtta	catgaggctc	aagaaaaaaa	tgagaaactc	720
acaaaagaat	tggaggaaat	aaagtcacgc	aagcaaggag	aggagcgagg	cgggtataca	780
attacatgaa	tgccgttgag	agagatttgg	cagccttaag	gcagggaatg	ggactgagta	840
gaaggtcttc	gacttcctca	gagccaactc	ctacagttaa	aaccctc		887

<210> 52
 <211> 491
 <212> DNA
 <213> Homo sapien

ggcacgagct	tttccaaaaa	tcattgtgct	cctttctcta	aagttottac	atittataga	60
aaggaacctt	tcactcttga	ggcctactac	agctctcctc	aggatttgcc	ctatccagat	120
cctgctatag	ctcagttttc	agttcagaaa	gtcactcctc	agtctgatgg	ctccagttca	180
aaagtgaag	tcaaagttcg	agtaaatgtc	catggcattt	tcagtgtgtc	cagtgcattc	240
ttagtggagg	ttcacaagtc	tgaggaaaat	gaggagccaa	tggaacaga	tcagaatgca	300
aaggagggaag	agaagatgca	agtggaccag	gaggaaccac	atgttgaaga	gcaacagcag	360
cagacaccag	gcagaaaaata	aggcagagtc	tgaagaaatg	gagacctctc	aagctggatc	420
caaggataaa	aagatggacc	aaccacccca	agccaagaag	gcaaaagtga	agaccagtac	480
tgtggacctg	g					491

<210> 53
 <211> 787
 <212> DNA
 <213> Homo sapien

aagcagttga	gtaggcagaa	aaaagaacct	cttcattaag	gattaaaatg	tataggccag	60
cacgtgtaac	ttcgacttca	agatttctga	atccatatgt	agtatgtttc	attgtcgtcg	120
caggggtagt	gatcctggca	gtcaccatag	ctctacttgt	ttacttttta	gcttttgatc	180
aaaaatctta	cttttatagg	agcagttttc	aactcctaaa	tgttgaatat	aatagtcagt	240
taaattcacc	agctacacag	gaatacagga	ctttgagtgg	agaattgaa	tctctgatta	300
ctaaaacatt	caaagaatca	aatttaagaa	atcagttcat	cagagctcat	gttgccaaac	360
tgaggcaaga	tggtagtgg	gtgagagcgg	atgttgtcat	gaaatttcaa	ttcactagaa	420
ataacaatgg	agcatcaatg	aaaagcagaa	ttgagtctgt	tttacgacaa	atgctgaata	480
actctggaaa	cctggaaata	aacccttcaa	ctgagataac	atcacttact	gaccaggctg	540
cagcaaattg	gcttattaat	gaatgtgggg	ccggtccaga	cctaataaca	ttgtctgagc	600
agagaatcct	tggaggcact	gaggctgagg	agggaagctg	gccgtggcaa	gtcagctctg	660
ggctcaataa	tgcccaccac	tgtggaggca	gcctgatcaa	taacatgtgg	atcctgacag	720
cagctcactg	cttcagaagc	aactctaatc	ctcgtgactg	gattgccacg	tctggtatit	780
ccacaac						787

<210> 54
 <211> 386
 <212> DNA

<213> Homo sapien

<400> 54
 ggcattttca gtgtgtccag tgcattcttta gtggagggttc acaagtctga ggaaaatgag 60
 gagccaatgg aaacagatca gaatgcaaag gaggaagaga agatgcaagt ggaccaggag 120
 gaaccacatg ttgaagagca acagcagcag acaccagcag aaaataaggc agagtctgaa 180
 gaaatggaga cctctcaagc tggatccaag gataaaaaga tggaccaacc accccaagcc 240
 aagaaggcaa aagtgaagac cagtactgtg gacctgccaa tcgagaatca gctattatgg 300
 cagatagaca gagagatgct caacttgtag attgaaaatg agggtaagat gatcatgcag 360
 gataaactgg agaaggagcg gaatga 386

<210> 55

<211> 1462

<212> DNA

<213> Homo sapien

<400> 55
 aagcagttga gtaggcagaa aaaagaacct ottcattaag gattaaaatg tataggccag 60
 cacgtgtaac ttcgacttca agatttctga atccatatgt agtatgtttc attgtcgtcg 120
 caggggtagt gatcctggca gtcaccatag ctctacttgt ttacttttta gcttttgatc 180
 aaaaatctta cttttatagg agcagttttc aactcctaaa tgttgaatat aatagtcagt 240
 taaattcacc agctacacag gaatacagga ctttgagtgg aagaattgaa tctctgatta 300
 ctaaaacatt caaagaatca aatttaagaa atcagttcat cagagctcat gttgccaaac 360
 tgaggcaaga tggtagtggt gtgagagcgg atgttgtcat gaaatttcaa ttcactagaa 420
 ataacaatgg agcatcaatg aaaagcagaa ttgagtctgt tttacgacaa atgctgaata 480
 actctggaaa cctggaaata aacccttcaa ctgagataac atcacttact gaccaggctg 540
 cagcaaattg gcttattaat gaatgtgggg ccggtccaga cctaataaca ttgtctgagc 600
 agagaatcct tggaggcact gaggctgagg agggaagctg gccgtggcaa gtcagtctgc 660
 ggctcaataa tgcccaccac tgtggaggca gcctgatcaa taacatgtgg atcctgacag 720
 cagctcactg cttcagaagc aactctaata ctcgtgactg gattgccacg tctggtatct 780
 ccacaacatt tcctaaacta agaatgagag taagaaatat ttttaattcat aacaattata 840
 aatctgcaac tcatgaaaat gacattgcac ttgtgagact tgagaacagt gtcaccttta 900
 ccaaagatat ccatagtgtg tgtctcccag ctgctaccca gaattattcca cctggctcta 960
 ctgcttatgt aacaggatgg ggcgtcaag aatatgctgg ccacacagtt ccagagctaa 1020
 ggcaaggaca ggtcagaata ataatgtaag atgtatgtaa tgcaccacat agttataatg 1080
 gagccatctt gtctggaatg ctgtgtgctg gagtacctca aggtggagtg gacgcagtgc 1140
 agggtgactc tgggtggcca ctagtacaag aagactcacg gcggctttgg tttattgtgg 1200
 ggatagtaag ctggggagat cagtgtggcc tgccggataa gccaggagtg tatactcgag 1260
 tgacagcata cattgactgg attaggcaac aaactgggat ctagtgcaac aagtgcattc 1320
 ctgttgcaaa gtctgtatgc aggtgtgcct gtcttaaat ccaaagcttt acatttcaac 1380
 tgaaaaagaa actagaaatg tcctaattta acatcttgtt acataaatat ggtttaacaa 1440
 aaaaaaaaaa aaaaaactcg ag 1462

<210> 56

<211> 159

<212> PRT

<213> Homo sapien

<400> 56
 Thr Met Tyr Arg Ala Leu Arg Leu Leu Ala Arg Ser Arg Pro Leu Val
 1 5 10 15
 Arg Ala Pro Ala Ala Ala Leu Ala Ser Ala Pro Gly Leu Gly Gly Ala
 20 25 30
 Ala Val Pro Ser Phe Trp Pro Pro Asn Ala Ala Arg Met Ala Ser Gln

35 40 45
 Asn Ser Phe Arg Ile Glu Tyr Asp Thr Phe Gly Glu Leu Lys Val Pro
 50 55 60
 Asn Asp Lys Tyr Tyr Gly Ala Gln Thr Val Arg Ser Thr Met Asn Phe
 65 70 75 80
 Lys Ile Gly Gly Val Thr Glu Arg Met Pro Thr Pro Val Ile Lys Ala
 85 90 95
 Phe Gly Ile Leu Lys Arg Ala Ala Ala Glu Val Asn Gln Asp Tyr Gly
 100 105 110
 Leu Asp Pro Lys Ile Ala Asn Ala Ile Met Lys Ala Ala Asp Glu Val
 115 120 125
 Ala Glu Gly Lys Leu Asn Asp His Phe Pro Leu Val Val Trp Gln Thr
 130 135 140
 Gly Ser Gly Thr Gln Thr Asn Met Asn Val Asn Glu Val Ile Ser
 145 150 155

<210> 57
 <211> 165
 <212> PRT
 <213> Homo sapien

<400> 57
 Lys Lys Ser Met Phe Ala Glu Ile Gln Ile Gln Asp Lys Asp Arg Met
 1 5 10 15
 Gly Thr Ala Gly Lys Val Ile Lys Cys Lys Ala Ala Val Leu Trp Glu
 20 25 30
 Gln Lys Gln Pro Phe Ser Ile Glu Glu Ile Glu Val Ala Pro Pro Lys
 35 40 45
 Thr Lys Glu Val Arg Ile Lys Ile Leu Ala Thr Gly Ile Cys Arg Thr
 50 55 60
 Asp Asp His Val Ile Lys Gly Thr Met Val Ser Lys Phe Pro Val Ile
 65 70 75 80
 Val Gly His Glu Ala Thr Gly Ile Val Glu Ser Ile Gly Glu Gly Val
 85 90 95
 Thr Thr Val Lys Pro Gly Asp Lys Val Ile Pro Leu Phe Leu Pro Gln
 100 105 110
 Cys Arg Glu Cys Asn Ala Cys Arg Asn Pro Asp Gly Asn Leu Cys Ile
 115 120 125
 Arg Ser Asp Ile Thr Gly Arg Gly Val Leu Ala Asp Gly Thr Thr Arg
 130 135 140
 Phe Thr Cys Lys Gly Glu Pro Val His His Phe Met Asn Thr Ser Thr
 145 150 155 160
 Phe Thr Glu Tyr Thr
 165

<210> 58
 <211> 259
 <212> PRT
 <213> Homo sapien

<400> 58
 Glu Ser Glu Gln Lys Gly Lys Ala Ala Leu Ala Ala Thr Leu Glu Glu
 1 5 10 15
 Tyr Lys Ala Thr Val Ala Ser Asp Gln Ile Glu Met Asn Arg Leu Lys

20 25 30
 Ala Gln Leu Glu Asn Glu Lys Gln Lys Val Ala Glu Leu Tyr Ser Ile
 35 40 45
 His Asn Ser Gly Asp Lys Ser Asp Ile Gln Asp Leu Leu Glu Ser Val
 50 55 60
 Arg Leu Asp Lys Glu Lys Ala Glu Thr Leu Ala Ser Ser Leu Gln Glu
 65 70 75 80
 Asp Leu Ala His Thr Arg Asn Asp Ala Asn Arg Leu Gln Asp Ala Ile
 85 90 95
 Ala Lys Val Glu Asp Glu Tyr Arg Ala Phe Gln Glu Glu Ala Lys Lys
 100 105 110
 Gln Ile Glu Asp Leu Asn Met Thr Leu Glu Lys Leu Arg Ser Asp Leu
 115 120 125
 Asp Glu Lys Glu Thr Glu Arg Ser Asp Met Lys Glu Thr Ile Phe Glu
 130 135 140
 Leu Glu Asp Glu Val Glu Gln His Arg Ala Val Lys Leu His Asp Asn
 145 150 155 160
 Leu Ile Ile Ser Asp Leu Glu Asn Thr Val Lys Lys Leu Gln Asp Gln
 165 170 175
 Lys His Asp Met Glu Arg Glu Ile Lys Thr Leu His Arg Arg Leu Arg
 180 185 190
 Glu Glu Ser Ala Glu Trp Arg Gln Phe Gln Ala Asp Leu Gln Thr Ala
 195 200 205
 Val Val Ile Ala Asn Asp Ile Lys Ser Glu Ala Gln Glu Glu Ile Gly
 210 215 220
 Asp Leu Lys Arg Arg Leu His Glu Ala Gln Glu Lys Asn Glu Lys Leu
 225 230 235 240
 Thr Lys Glu Leu Glu Glu Ile Lys Ser Arg Lys Gln Glu Glu Glu Arg
 245 250 255
 Gly Gly Tyr

<210> 59

<211> 125

<212> PRT

<213> Homo sapien

<400> 59

Gly Thr Ser Phe Ser Lys Asn His Ala Ala Pro Phe Ser Lys Val Leu
 1 5 10 15
 Thr Phe Tyr Arg Lys Glu Pro Phe Thr Leu Glu Ala Tyr Tyr Ser Ser
 20 25 30
 Pro Gln Asp Leu Pro Tyr Pro Asp Pro Ala Ile Ala Gln Phe Ser Val
 35 40 45
 Gln Lys Val Thr Pro Gln Ser Asp Gly Ser Ser Ser Lys Val Lys Val
 50 55 60
 Lys Val Arg Val Asn Val His Gly Ile Phe Ser Val Ser Ser Ala Ser
 65 70 75 80
 Leu Val Glu Val His Lys Ser Glu Glu Asn Glu Glu Pro Met Glu Thr
 85 90 95
 Asp Gln Asn Ala Lys Glu Glu Glu Lys Met Gln Val Asp Gln Glu Glu
 100 105 110
 Pro His Val Glu Glu Gln Gln Gln Gln Thr Pro Gly Arg
 115 120 125

<210> 60
 <211> 246
 <212> PRT
 <213> Homo sapien

<400> 60
 Met Tyr Arg Pro Ala Arg Val Thr Ser Thr Ser Arg Phe Leu Asn Pro
 1 5 10 15
 Tyr Val Val Cys Phe Ile Val Val Ala Gly Val Val Ile Leu Ala Val
 20 25 30
 Thr Ile Ala Leu Leu Val Tyr Phe Leu Ala Phe Asp Gln Lys Ser Tyr
 35 40 45
 Phe Tyr Arg Ser Ser Phe Gln Leu Leu Asn Val Glu Tyr Asn Ser Gln
 50 55 60
 Leu Asn Ser Pro Ala Thr Gln Glu Tyr Arg Thr Leu Ser Gly Arg Ile
 65 70 75 80
 Glu Ser Leu Ile Thr Lys Thr Phe Lys Glu Ser Asn Leu Arg Asn Gln
 85 90 95
 Phe Ile Arg Ala His Val Ala Lys Leu Arg Gln Asp Gly Ser Gly Val
 100 105 110
 Arg Ala Asp Val Val Met Lys Phe Gln Phe Thr Arg Asn Asn Asn Gly
 115 120 125
 Ala Ser Met Lys Ser Arg Ile Glu Ser Val Leu Arg Gln Met Leu Asn
 130 135 140
 Asn Ser Gly Asn Leu Glu Ile Asn Pro Ser Thr Glu Ile Thr Ser Leu
 145 150 155 160
 Thr Asp Gln Ala Ala Ala Asn Trp Leu Ile Asn Glu Cys Gly Ala Gly
 165 170 175
 Pro Asp Leu Ile Thr Leu Ser Glu Gln Arg Ile Leu Gly Gly Thr Glu
 180 185 190
 Ala Glu Glu Gly Ser Trp Pro Trp Gln Val Ser Leu Arg Leu Asn Asn
 195 200 205
 Ala His His Cys Gly Gly Ser Leu Ile Asn Asn Met Trp Ile Leu Thr
 210 215 220
 Ala Ala His Cys Phe Arg Ser Asn Ser Asn Pro Arg Asp Trp Ile Ala
 225 230 235 240
 Thr Ser Gly Ile Ser Thr
 245

<210> 61
 <211> 128
 <212> PRT
 <213> Homo sapien

<400> 61
 Gly Ile Phe Ser Val Ser Ser Ala Ser Leu Val Glu Val His Lys Ser
 1 5 10 15
 Glu Glu Asn Glu Glu Pro Met Glu Thr Asp Gln Asn Ala Lys Glu Glu
 20 25 30
 Glu Lys Met Gln Val Asp Gln Glu Glu Pro His Val Glu Glu Gln Gln
 35 40 45
 Gln Gln Thr Pro Ala Glu Asn Lys Ala Glu Ser Glu Glu Met Glu Thr
 50 55 60

Ser Gln Ala Gly Ser Lys Asp Lys Lys Met Asp Gln Pro Pro Gln Ala
 65 70 75 80
 Lys Lys Ala Lys Val Lys Thr Ser Thr Val Asp Leu Pro Ile Glu Asn
 85 90 95
 Gln Leu Leu Trp Gln Ile Asp Arg Glu Met Leu Asn Leu Tyr Ile Glu
 100 105 110
 Asn Glu Gly Lys Met Ile Met Gln Asp Lys Leu Glu Lys Glu Arg Asn
 115 120 125

<210> 62
 <211> 418
 <212> PRT
 <213> Homo sapien

<400> 62
 Met Tyr Arg Pro Ala Arg Val Thr Ser Thr Ser Arg Phe Leu Asn Pro
 1 5 10 15
 Tyr Val Val Cys Phe Ile Val Val Ala Gly Val Val Ile Leu Ala Val
 20 25 30
 Thr Ile Ala Leu Leu Val Tyr Phe Leu Ala Phe Asp Gln Lys Ser Tyr
 35 40 45
 Phe Tyr Arg Ser Ser Phe Gln Leu Leu Asn Val Glu Tyr Asn Ser Gln
 50 55 60
 Leu Asn Ser Pro Ala Thr Gln Glu Tyr Arg Thr Leu Ser Gly Arg Ile
 65 70 75 80
 Glu Ser Leu Ile Thr Lys Thr Phe Lys Glu Ser Asn Leu Arg Asn Gln
 85 90 95
 Phe Ile Arg Ala His Val Ala Lys Leu Arg Gln Asp Gly Ser Gly Val
 100 105 110
 Arg Ala Asp Val Val Met Lys Phe Gln Phe Thr Arg Asn Asn Asn Gly
 115 120 125
 Ala Ser Met Lys Ser Arg Ile Glu Ser Val Leu Arg Gln Met Leu Asn
 130 135 140
 Asn Ser Gly Asn Leu Glu Ile Asn Pro Ser Thr Glu Ile Thr Ser Leu
 145 150 155 160
 Thr Asp Gln Ala Ala Ala Asn Trp Leu Ile Asn Glu Cys Gly Ala Gly
 165 170 175
 Pro Asp Leu Ile Thr Leu Ser Glu Gln Arg Ile Leu Gly Gly Thr Glu
 180 185 190
 Ala Glu Glu Gly Ser Trp Pro Trp Gln Val Ser Leu Arg Leu Asn Asn
 195 200 205
 Ala His His Cys Gly Gly Ser Leu Ile Asn Asn Met Trp Ile Leu Thr
 210 215 220
 Ala Ala His Cys Phe Arg Ser Asn Ser Asn Pro Arg Asp Trp Ile Ala
 225 230 235 240
 Thr Ser Gly Ile Ser Thr Thr Phe Pro Lys Leu Arg Met Arg Val Arg
 245 250 255
 Asn Ile Leu Ile His Asn Asn Tyr Lys Ser Ala Thr His Glu Asn Asp
 260 265 270
 Ile Ala Leu Val Arg Leu Glu Asn Ser Val Thr Phe Thr Lys Asp Ile
 275 280 285
 His Ser Val Cys Leu Pro Ala Ala Thr Gln Asn Ile Pro Pro Gly Ser
 290 295 300
 Thr Ala Tyr Val Thr Gly Trp Gly Ala Gln Glu Tyr Ala Gly His Thr

305 Val Pro Glu Leu Arg Gln Gly Gln Val Arg Ile Ile Ser Asn Asp Val 320
 325 Cys Asn Ala Pro His Ser Tyr Asn Gly Ala Ile Leu Ser Gly Met Leu 335
 340 Cys Ala Gly Val Pro Gln Gly Gly Val Asp Ala Cys Gln Gly Asp Ser 350
 355 Gly Gly Pro Leu Val Gln Glu Asp Ser Arg Arg Leu Trp Phe Ile Val 365
 370 Gly Ile Val Ser Trp Gly Asp Gln Cys Gly Leu Pro Asp Lys Pro Gly 380
 385 Val Tyr Thr Arg Val Thr Ala Tyr Ile Asp Trp Ile Arg Gln Gln Thr 395
 405 410 415

Gly Ile

<210> 63
 <211> 776
 <212> DNA
 <213> Homo sapien

<400> 63
 cacagatggt gatagaggaa tccatcttgc agtcagataa agccctcact gatagagaga 60
 aggcagtagc agtggatcgg gccagaagg aggcagctga gaaggaaacag gaacttttaa 120
 aacagaaatt acaggagcag ccagcaacag atggaggctc aagataagag tcgcaaggaa 180
 aactagccaa ctgaaggaga agctgcagat ggagagagaa cacctactga gagagcagat 240
 tatgatgttg gagcacacgc agaaggtcca aaatgattgg cttcatgaag gatttaagaa 300
 gaagtatgag gagatgaatg cagagataag tcaattttaa cgtatgattg atactacaaa 360
 aaatgatgat actccctgga ttgcacgaac cttggacaac cttgccgatg agctaactgc 420
 aatattgtct gtcctgcta aattaattgg tcatgggtgc aaaggtgtga gctcactctt 480
 taaaaagcat aagctccctt tttaaggata ttatagattg tacatatatg ctttggacta 540
 tttttgatct gtatgttttt cattttcatt cagcaagttt tttttttttt tcagagtctt 600
 actctgttgc ccaggctgga gtacagtggg gcaatctcag ctactgcaa cctctgcctc 660
 ctgggttcaa gagattcacc tgccctcagc ccctagtagc tgggattata ggtgtacacc 720
 accacacca gctaattttt gtatttttag tagagatggg gtttcactat gttggc 776

<210> 64
 <211> 160
 <212> DNA
 <213> Homo sapien

<400> 64
 gcagcgctct cggttgcaat acccactgga aggacttagg cgctcgctg gacaccgcaa 60
 gccctcagc agcctcggcc caagaggcct gctttccact cgctagcccc gccggggggtc 120
 cgtgtcctgt ctcggtggcc ggaccggggc ccgagcccga 160

<210> 65
 <211> 72
 <212> PRT
 <213> Homo sapien

<400> 65
 Leu Ser Ala Met Gly Phe Thr Ala Ala Gly Ile Ala Ser Ser Ser Ile
 1 5 10 15

Ala Ala Lys Met Met Ser Ala Ala Ala Ile Ala Asn Gly Gly Gly Val
 20 25 30
 Ala Ser Gly Ser Leu Val Ala Thr Leu Gln Ser Leu Gly Ala Thr Gly
 35 40 45
 Leu Ser Gly Leu Thr Lys Phe Ile Leu Gly Ser Ile Gly Ser Ala Ile
 50 55 60
 Ala Ala Val Ile Ala Arg Phe Tyr
 65 70

<210> 66
 <211> 2581
 <212> DNA
 <213> Homo sapien

<400> 66
 ctttcaacc gcgctcgccg gctccagccc cgcgcgcccc cacccttgc cctcccgccg 60
 gctccgcagg gtgagggtggc tttgaccccc gggtgcccgg ccagcacgac cgaggagggtg 120
 gctggacagc tggaggatga acggagaagc cgactgcccc acagacctgg aaatggccgc 180
 ccccaaaggc caagaccgtt ggtcccagga agacatgctg actttgctgg aatgcatgaa 240
 gaacaacctt ccatccaatg acagctccaa gttcaaaacc accgaatcac acatggactg 300
 ggaaaaagta gcatttaaaag acttttctgg agacatgtgc aagctcaaat ggggtggagat 360
 ttctaagtga gtgaggaagt tccgtacatt gacagaattg atcctcgatg ctcaggaaca 420
 tgttaaaaaat ccttacaagg gcaaaaaact caagaaacac ccagacttcc caaagaagcc 480
 cctgaccctt tatttccgct tcttcatgga gaagcggggc aagtatgcga aactccaccc 540
 tgagatgagc aacctggacc taaccaagat tctgtccaag aaatacaagg agcttccgga 600
 gaagaagaag atgaaatata ttcaggactt ccagagagag aaacaggagt tcgagcgaaa 660
 cctggccccga ttcaggggagg atcaccccga cctaataccag aatgccaaaga aatcgacat 720
 cccagagaag cccaaaaccc cccagcagct gtggtacacc caccgagaaga aggtgtatct 780
 caaagtgcgg ccagatgcca ctacgaagga ggtgaaggac tccctgggga agcagtggtc 840
 tcagctctcg gacaaaaaga ggctgaaatg gattcataag gccctggagc agcggaaagga 900
 gtacgaggag atcatgagag actatatcca gaagcaccca gagctgaaca tcagtgaaga 960
 gggatatcacc aagtccaccc tcaccaaggc cgaacgccag ctcaaggaca agtttgacgg 1020
 gcgacccacc aagccacctc cgaacagcta ctcgctgtac tgcgcagagc tcatggccaa 1080
 catgaaggac gtgcccagca cagagcgcat ggtgctgtgc agccagcagt ggaagctgct 1140
 gtcccagaag gagaaggacg cctatcacia gaagtgtgat cagaaaaaga aagattacga 1200
 ggtggagctg ctccgtttcc tcgagagcct gcctgaggag gagcagcagc gggctctggg 1260
 ggaagagaag atgctgaaca tcaacaagaa gcaggccacc agccccgctt ccaagaagcc 1320
 agcccaggaa gggggcaagg gcggctccga gaagcccaag cggccctggt cggccatggt 1380
 catcttctcg gaggagaaac ggccggcagct gcaggaggag cggcctgagc tctccgagag 1440
 cgagctgacc cgcctgctgg cccgaatgtg gaacgacctg tctgagaaga agaaggccaa 1500
 gtacaaggcc cgagaggcgg cgctcaaggc tcagtcggag aggaagcccg gcggggagcg 1560
 cgaggaacgg ggcaagctgc cccgaatgtg ccaaaagagc gaggagatct ggcaacagag 1620
 cgttatcggc gactacctgg cccgcttcaa gaatgaccgg gtgaaggcct tgaaagccat 1680
 ggaaatgacc tggataaaca tggaaaagaa ggagaaactg atgtggatta agaaggcagc 1740
 cgaagaccaa aagcgatatg agagagagct gagtgaagtg cgggcacctc cagctgctac 1800
 aaattcttcc aagaagatga aattccaggg agaaccctcc aagcctccca tgaacgggta 1860
 ccagaagttc tcccaggagc tgctgtccaa tggggagctg aaccacctgc cgctgaagga 1920
 gcgcatggtg gagatcggca gtcgctggca gcgcatctcc cagagccaga aggagcacta 1980
 caaaaagctg gccgaggagc agcaaaaagca gtacaagggt cacctggacc tctgggttaa 2040
 gagcctgtct ccccaggacc gtgcagcata taaagagtac atctccaata aacgtaagag 2100
 catgaccaag ctgcgaggcc caaaccctca atccagccgg actactctgc agtccaagtc 2160
 ggagtccgag gaggatgatg aagaggatga gcatgacgag gacgaggatg aagaagagga 2220
 agatgatgag aatggggact cctctgaaga tggcggcgac tcctctgagt ccagcagcga 2280
 ggacgagagc gaggatgggg atgagaatga agaggatgac gaggacgaag acgacgacga 2340

ggatgacgat gaggatgaag ataatgagtc cgagggcagc agctccagct cctcctcctt 2400
 aggggactcc tcagactttg actccaactg aggettagcc ccaccccagg ggagccaggg 2460
 agagcccagg agctcccctc cccaactgac cacctttgtt tcttccccat gttctgtccc 2520
 ttgccccctt ggctccccc actttctttc tttctttaa aaaaaaaaaa aaaaactcga 2580
 g 2581

<210> 67
 <211> 764
 <212> PRT
 <213> Homo sapien

<400> 67
 Met Asn Gly Glu Ala Asp Cys Pro Thr Asp Leu Glu Met Ala Ala Pro
 1 5 10 15
 Lys Gly Gln Asp Arg Trp Ser Gln Glu Asp Met Leu Thr Leu Leu Glu
 20 25 30
 Cys Met Lys Asn Asn Leu Pro Ser Asn Asp Ser Ser Lys Phe Lys Thr
 35 40 45
 Thr Glu Ser His Met Asp Trp Glu Lys Val Ala Phe Lys Asp Phe Ser
 50 55 60
 Gly Asp Met Cys Lys Leu Lys Trp Val Glu Ile Ser Asn Glu Val Arg
 65 70 75 80
 Lys Phe Arg Thr Leu Thr Glu Leu Ile Leu Asp Ala Gln Glu His Val
 85 90 95
 Lys Asn Pro Tyr Lys Gly Lys Lys Leu Lys Lys His Pro Asp Phe Pro
 100 105 110
 Lys Lys Pro Leu Thr Pro Tyr Phe Arg Phe Phe Met Glu Lys Arg Ala
 115 120 125
 Lys Tyr Ala Lys Leu His Pro Glu Met Ser Asn Leu Asp Leu Thr Lys
 130 135 140
 Ile Leu Ser Lys Lys Tyr Lys Glu Leu Pro Glu Lys Lys Lys Met Lys
 145 150 155 160
 Tyr Ile Gln Asp Phe Gln Arg Glu Lys Gln Glu Phe Glu Arg Asn Leu
 165 170 175
 Ala Arg Phe Arg Glu Asp His Pro Asp Leu Ile Gln Asn Ala Lys Lys
 180 185 190
 Ser Asp Ile Pro Glu Lys Pro Lys Thr Pro Gln Gln Leu Trp Tyr Thr
 195 200 205
 His Glu Lys Lys Val Tyr Leu Lys Val Arg Pro Asp Ala Thr Thr Lys
 210 215 220
 Glu Val Lys Asp Ser Leu Gly Lys Gln Trp Ser Gln Leu Ser Asp Lys
 225 230 235 240
 Lys Arg Leu Lys Trp Ile His Lys Ala Leu Glu Gln Arg Lys Glu Tyr
 245 250 255
 Glu Glu Ile Met Arg Asp Tyr Ile Gln Lys His Pro Glu Leu Asn Ile
 260 265 270
 Ser Glu Glu Gly Ile Thr Lys Ser Thr Leu Thr Lys Ala Glu Arg Gln
 275 280 285
 Leu Lys Asp Lys Phe Asp Gly Arg Pro Thr Lys Pro Pro Pro Asn Ser
 290 295 300
 Tyr Ser Leu Tyr Cys Ala Glu Leu Met Ala Asn Met Lys Asp Val Pro
 305 310 315 320
 Ser Thr Glu Arg Met Val Leu Cys Ser Gln Gln Trp Lys Leu Leu Ser
 325 330 335

Gln Lys Glu Lys Asp Ala Tyr His Lys Lys Cys Asp Gln Lys Lys Lys
 340 345 350
 Asp Tyr Glu Val Glu Leu Leu Arg Phe Leu Glu Ser Leu Pro Glu Glu
 355 360 365
 Glu Gln Gln Arg Val Leu Gly Glu Glu Lys Met Leu Asn Ile Asn Lys
 370 375 380
 Lys Gln Ala Thr Ser Pro Ala Ser Lys Lys Pro Ala Gln Glu Gly Gly
 385 390 395 400
 Lys Gly Gly Ser Glu Lys Pro Lys Arg Pro Val Ser Ala Met Phe Ile
 405 410 415
 Phe Ser Glu Glu Lys Arg Arg Gln Leu Gln Glu Glu Arg Pro Glu Leu
 420 425 430
 Ser Glu Ser Glu Leu Thr Arg Leu Leu Ala Arg Met Trp Asn Asp Leu
 435 440 445
 Ser Glu Lys Lys Lys Ala Lys Tyr Lys Ala Arg Glu Ala Ala Leu Lys
 450 455 460
 Ala Gln Ser Glu Arg Lys Pro Gly Gly Glu Arg Glu Glu Arg Gly Lys
 465 470 475 480
 Leu Pro Glu Ser Pro Lys Arg Ala Glu Glu Ile Trp Gln Gln Ser Val
 485 490 495
 Ile Gly Asp Tyr Leu Ala Arg Phe Lys Asn Asp Arg Val Lys Ala Leu
 500 505 510
 Lys Ala Met Glu Met Thr Trp Asn Asn Met Glu Lys Lys Glu Lys Leu
 515 520 525
 Met Trp Ile Lys Lys Ala Ala Glu Asp Gln Lys Arg Tyr Glu Arg Glu
 530 535 540
 Leu Ser Glu Met Arg Ala Pro Pro Ala Ala Thr Asn Ser Ser Lys Lys
 545 550 555 560
 Met Lys Phe Gln Gly Glu Pro Lys Lys Pro Pro Met Asn Gly Tyr Gln
 565 570 575
 Lys Phe Ser Gln Glu Leu Leu Ser Asn Gly Glu Leu Asn His Leu Pro
 580 585 590
 Leu Lys Glu Arg Met Val Glu Ile Gly Ser Arg Trp Gln Arg Ile Ser
 595 600 605
 Gln Ser Gln Lys Glu His Tyr Lys Lys Leu Ala Glu Glu Gln Gln Lys
 610 615 620
 Gln Tyr Lys Val His Leu Asp Leu Trp Val Lys Ser Leu Ser Pro Gln
 625 630 635 640
 Asp Arg Ala Ala Tyr Lys Glu Tyr Ile Ser Asn Lys Arg Lys Ser Met
 645 650 655
 Thr Lys Leu Arg Gly Pro Asn Pro Lys Ser Ser Arg Thr Thr Leu Gln
 660 665 670
 Ser Lys Ser Glu Ser Glu Glu Asp Asp Glu Glu Asp Glu Asp Asp Glu
 675 680 685
 Asp Glu Asp Glu Glu Glu Glu Asp Asp Glu Asn Gly Asp Ser Ser Glu
 690 695 700
 Asp Gly Gly Asp Ser Ser Glu Ser Ser Ser Glu Asp Glu Ser Glu Asp
 705 710 715 720
 Gly Asp Glu Asn Glu Glu Asp Asp Glu Asp Glu Asp Asp Asp Glu Asp
 725 730 735
 Asp Asp Glu Asp Glu Asp Asn Glu Ser Glu Gly Ser Ser Ser Ser Ser
 740 745 750
 Ser Ser Leu Gly Asp Ser Ser Asp Phe Asp Ser Asn
 755 760

<210> 68
 <211> 434
 <212> DNA
 <213> Homo sapien

<400> 68
 ctaagatgct ggatgctgaa gacatcgctg gaactgcccg gccagatgag aaagccatta 60
 tgacttatgt gtctagcttc tatcatgcct tctctggagc ccagaaggca gaaacagcag 120
 ccaatcgcat ctgcaaagtg ttggcgggtca atcaagagaa cgagcagctt atggaagact 180
 atgagaagct ggccagtgat ctggttgagtg ggatccgccg caccatccca tggctggaga 240
 atcgggtgccc tgagaacacc atgcatgccca tgcagcagaa gctggaggac ttccgagact 300
 atagacgcct gcacaagccg cccaaggtgc aggagaagtg ccagctggag atcaacttta 360
 acacgctgca gaccaaactg cggctcagca accggcctgc cttcatgccc tccgagggca 420
 ggatggtctc ggat 434

<210> 69
 <211> 244
 <212> DNA
 <213> Homo sapien

<400> 69
 aggcagcatg ctcggtgaga gtcatacaca ctccctaate tcaagtacgc agggacacaa 60
 aactgcgga aggccgcagg gtcctctgcc taggaaaacc agagaccttt gttcacttgt 120
 ttatgtgctg accttccctc cactattgtc ctgtgacctt gccaaatccc ctttgtgag 180
 aaacacccaa gaatgatcaa taaaaaataa attaatattag gaaaaaaaaa aaaaaaaact 240
 cgag 244

<210> 70
 <211> 437
 <212> DNA
 <213> Homo sapien

<400> 70
 ctgggacggg agcgtccagc gggactcgaa cccagatgt gaaggcggtt ctggaaagtc 60
 cttggtccct ggatccagcg tcggccagcc cagagcccgt gccgcacatc cttgctcct 120
 ccaggcagtg ggaccccgcg agctgcacgt ccctgggcac ggacaagtgt gaggcactgt 180
 tggggctgtg ccagggtgcg ggtgggtgc cccctttctc agaaccttcc agcctggtgc 240
 cgtggccccc aggccggagt cttcctaagg ctgtgaggcc acccctgtcc tggcctccgt 300
 tctcgacgca gcagaccttg cccgtgatga gcggggaggc ccttggctgg ctgggcccag 360
 ctggttccct ggccatgggg gctgcacctc tgggggagcc agccaaggag gaccccatgc 420
 tggcgagga agccggg 437

<210> 71
 <211> 271
 <212> DNA
 <213> Homo sapien

<400> 71
 gcgcagagtt ctgtcgtcca ccatcgagt aggaagagag cattggttcc cctgagatag 60
 aagagatggc tctcttcagt gccagctctc catacattaa cccgatcatc ccctttactg 120
 gaccaatcca aggagggctg caggaggagc ttcaggtgac cctccagggg actaccgaga 180
 gttttgcaca aaagtttgtg gtgaactttt cagaacagct tcaatggaga tgacttggcc 240
 ttccacttca accccggtta tgaggaagga g 271

<210> 72
 <211> 290
 <212> DNA
 <213> Homo sapien

<400> 72
 ccgagcccta cccggaggtc tccagaatcc ccaccgtcag gggatgcaac ggctccctgt 60
 ctggtgccct ctccctgctgc gaggactcgg cccagggctc gggcccgccc aaggccccta 120
 cggtggccga gggteccagc tcctgccttc ggcggaacgt gatcagcgag agggagcgca 180
 ggaagcggat gtcgttgagc tgtgagcgtc tgccggccct gctgccccag ttcgatggcc 240
 ggcgggagga catggcctcg gtcctggaga tgtctgttgc aattcctgcg 290

<210> 73
 <211> 144
 <212> PRT
 <213> Homo sapien

<400> 73
 Lys Met Leu Asp Ala Glu Asp Ile Val Gly Thr Ala Arg Pro Asp Glu
 1 5 10 15
 Lys Ala Ile Met Thr Tyr Val Ser Ser Phe Tyr His Ala Phe Ser Gly
 20 25 30
 Ala Gln Lys Ala Glu Thr Ala Ala Asn Arg Ile Cys Lys Val Leu Ala
 35 40 45
 Val Asn Gln Glu Asn Glu Gln Leu Met Glu Asp Tyr Glu Lys Leu Ala
 50 55 60
 Ser Asp Leu Leu Glu Trp Ile Arg Arg Thr Ile Pro Trp Leu Glu Asn
 65 70 75 80
 Arg Val Pro Glu Asn Thr Met His Ala Met Gln Gln Lys Leu Glu Asp
 85 90 95
 Phe Arg Asp Tyr Arg Arg Leu His Lys Pro Pro Lys Val Gln Glu Lys
 100 105 110
 Cys Gln Leu Glu Ile Asn Phe Asn Thr Leu Gln Thr Lys Leu Arg Leu
 115 120 125
 Ser Asn Arg Pro Ala Phe Met Pro Ser Glu Gly Arg Met Val Ser Asp
 130 135 140

<210> 74
 <211> 64
 <212> PRT
 <213> Homo sapien

<400> 74
 Gly Ser Met Leu Val Glu Ser His His His Ser Leu Ile Ser Ser Thr
 1 5 10 15
 Gln Gly His Lys His Cys Gly Arg Pro Gln Gly Pro Leu Pro Arg Lys
 20 25 30
 Thr Arg Asp Leu Cys Ser Leu Val Tyr Val Leu Thr Phe Pro Pro Leu
 35 40 45
 Leu Ser Cys Asp Pro Ala Lys Ser Pro Phe Val Arg Asn Thr Gln Glu
 50 55 60

<210> 75

[illegible]

```
<210> 76
<211> 69
<212> PRT
<213> Homo sapien
```

[illegible]

```
<210> 77
<211> 96
<212> PRT
<213> Homo sapien
```

	<400>	77																
Glu	Pro	Tyr	Pro	Glu	Val	Ser	Arg	Ile	Pro	Thr	Val	Arg	Gly	Cys	Asn			
1				5					10					15				
Gly	Ser	Leu	Ser	Gly	Ala	Leu	Ser	Cys	Cys	Glu	Asp	Ser	Ala	Gln	Gly			
			20					25					30					
Ser	Gly	Pro	Pro	Lys	Ala	Pro	Thr	Val	Ala	Glu	Gly	Pro	Ser	Ser	Cys			

35 40 45
 Leu Arg Arg Asn Val Ile Ser Glu Arg Glu Arg Arg Lys Arg Met Ser
 50 55 60
 Leu Ser Cys Glu Arg Leu Arg Ala Leu Leu Pro Gln Phe Asp Gly Arg
 65 70 75 80
 Arg Glu Asp Met Ala Ser Val Leu Glu Met Ser Val Ala Ile Pro Ala
 85 90 95

<210> 78
 <211> 2076
 <212> DNA
 <213> Homo sapien

<400> 78
 agaaaaagtc tatgtttgca gaaatacaga tccaagacaa agacaggatg ggcactgctg 60
 gaaaagtatt taaatgcaaa gcagctgtgc tttgggagca gaagcaaccc ttctccattg 120
 aggaaataga agttgcccc ccaaagacta aagaagttcg cattaagatt ttggccacag 180
 gaatctgtcg cacagatgac catgtgataa aaggaacaat ggtgtccaag tttccagtga 240
 ttgtgggaca tgaggcaact gggattgtag agagcattgg agaaggagtg actacagtga 300
 aaccaggtga caaagtcato cctctctttc tgccacaatg tagagaatgc aatgcttgct 360
 gcaaccaga tggcaacctt tgcattagga gcgatattac tggctgtgga gtactggctg 420
 atggcaccac cagatttaca tgcaagggca aaccagtcca ccacttcatg aacaccagta 480
 catttaccga gtacacagtg gtggatgaat cttctgttgc taagattgat gatgcagctc 540
 ctctgagaa agtctgttta attggctgtg ggttttccac tggatatggc gctgctgtta 600
 aaactggcaa ggtcaaacct ggttccactt gcgtcgttct tggcctgaga ggagttggcc 660
 tgtcagtcac catgggctgt aagtcagctg gtgcattctag gatcattggg attgacctca 720
 acaaagacaa atttgagaag gccatggctg taggtgccac tgagtgtatc agtcccaagg 780
 actctaccaa acccatcagt gaggtgctgt cagaaatgac aggcaacaac gtgggatata 840
 cctttgaagt tattgggcat ctgaaacca tgattgatgc cctggcatcc tgccacatga 900
 actatgggac cagcgtggtt gtaggagttc ctccatcagc caagatgctc acctatgacc 960
 cgatgttget cttcactgga cgcacatgga agggatgtgt ctttggaggt ttgaaaagca 1020
 gagatgatgt cccaaaacta gtgactgagt tcttgcaaaa gaaatttgac ctggaccagt 1080
 tgataactca tgtcttacca tttaaaaaaa tcagtgaagg atttgagctg ctcaattcag 1140
 gacaaagcat tcgaacggctc ctgacgtttt gagatccaaa gtggcaggag gtctgtgttg 1200
 tcatggtgaa ctggagtttc tcttgtgaga gttccctcat ctgaaatcat gtatctgtct 1260
 cacaaatata agcataagta gaagatttgt tgaagacata gaaccttat aaagaattat 1320
 taacctttat aaacatttaa agtcttgtga gcacctggga attagtataa taacaattgt 1380
 aatatttttg atttacattt tgtaaggcta taattgtatc ttttaagaaa acatacactt 1440
 ggatttctat gttgaaatgg agatttttaa gagttttaac cagctgctgc agatatatat 1500
 ctcaaaacag atatagcgta taaagatata gtaaatgcat ctcctagagt aatattcact 1560
 taacacattg aaactattat tttttagatt tgaatataaa tgtatttttt aaacacttgt 1620
 tatgagttaa cttggattac attttgaaat cagttcattc catgatgcat attactggat 1680
 tagattaaga aagacagaaa agattaaggg acgggcacat ttttcaacga ttaagaatca 1740
 tcattacata acttggtgaa actgaaaaag tatatcatat gggtagacaa ggctatttgc 1800
 cagcatatat taatatttta gaaaatattc cttttgtaat actgaatata aacatagagc 1860
 tagaatcata ttatcatact tatcataatg ttcaatttga tacagtagaa ttgcaagtcc 1920
 ttaagtcctt attcactgtg cttagtagtg actccattta ataaaaagtg tttttagttt 1980
 ttaacaacta cactgatgta tttatatata tttataacat gttaaaaatt ttttaaggaa 2040
 ttaaaaatta tataaaaaaa aaaaaaaaaa ctcgag 2076

<210> 79
 <211> 2790
 <212> DNA
 <213> Homo sapien

<400> 79
 aagcagttga gtaggcagaa aaaagaacct cttcattaag gattaaaatg tataggccag 60
 cacgtgtaac ttcgacttca agatttctga atccatatgt agtatgtttc attgtcgtcg 120
 caggggtagt gatcctggca gtcaccatag ctctacttgt ttacttttta gcttttgatc 180
 aaaaatctta cttttatagg agcagttttc aactcctaaa tgttgaatat aatagtcagt 240
 taaattcacc agctacacag gaatacagga ctttgagtgg aagaattgaa tctctgatta 300
 ctaaaacatt caaagaatca aatttaagaa atcagttcat cagagctcat gttgccaac 360
 tgaggcaaga tggtagtggt gtgagagcgg atgttgatcat gaaatttcaa ttcactagaa 420
 ataacaatgg agcatcaatg aaaagcagaa ttgagtcgtt tttacgacaa atgctgaata 480
 actctggaaa cctggaaata aacccttcaa ctgagataac atcacttact gaccaggctg 540
 cagcaaattg gcttattaat gaatgtgggg ccggtccaga cctaataaca ttgtctgagc 600
 agagaatcct tggaggcact gaggtgagg agggagctg gccgtggcaa gtcagtctgc 660
 ggctcaataa tgcccaccac tgtggaggca gcctgatcaa taacatgtgg atcctgacag 720
 cagctcactg cttcagaagc aactctaate ctctgactg gattgccacg tctggtattt 780
 ccacaacatt tcctaaacta agaatgagag taagaaatat ttttaattcat aacaattata 840
 aatctgcaac tcatgaaaat gacattgcac ttgtgagact tgagaacagt gtcaccttta 900
 ccaaagatat ccatagtgtg tgtctcccag ctgctaccca gaattattcca cctggctcta 960
 ctgcttatgt aacaggatgg ggcgtcaag aatatgctgg ccacacagtt ccagagctaa 1020
 ggcaaggaca ggtcagaata ataagtaatg atgtatgtaa tgcaccacat agttataatg 1080
 gagccatctt gtctggaatg ctgtgtgctg gactacctca aggtggagtg gacgcatgtc 1140
 aggggtgactc tgggtggcca ctagtacaag aagactcacg gcggctttgg tttattgtgg 1200
 ggatagtaag ctggggagat cagtgtggcc tgccggataa gccaggagtg tatactcgag 1260
 tgacagccta ccttgactgg attaggcaac aaactgggat ctagtgaac aagtgcattc 1320
 ctggttgcaaa gtctgtatgc aggtgtgcct gtcttaaaatt ccaaagcttt acatttcaac 1380
 tgaaaaagaa actagaaaatg tcctaattta acatcttgtt acataaatat ggtttaacaa 1440
 acacttttta acctttcttt attattaaag gttttctatt ttctccagag aactatatga 1500
 atgttgcata gtactgtggc tgtgtaacag aagaaacaca ctaaaactaat tacaagttta 1560
 acaatttcat tacagttgtg ctaaaatgccc gtagtgagaa gaacaggaac cttgagcatg 1620
 tatagtagag gaacctgcac aggtctgatg ggtcagagg gtcttctctg ggtttcactg 1680
 aggatgagaa gtaagcaaac tgtggaaaca tgcaaaggaa aaagtgatag aataatattc 1740
 aagacaaaaa gaacagtatg aggcaagaga aatagtatgt atttaaaatt tttggttact 1800
 caatatctta tacttagtat gagtctctaaa attaaaaatg tgaaactgtt gtactatacg 1860
 tataacctaa ccttaattat tctgtaagaa catgcttcca taggaaatag tggataattt 1920
 tcagctattt aaggcaaaaag ctaaaatagt tcaactcctca actgagaccc aaagaattat 1980
 agatattttt catgtagacc catgaaaaat atcaactcatc tacataaagg agagactata 2040
 tctattttat agagaagcta agaaatatac ctacacaaac ttgtcaggtg ctttacaact 2100
 acatagtact ttttaacaac aaaataataa ttttaagaat gaaaaattta atcatcgga 2160
 agaacgtccc actacagact toctatcact ggcagttata tttttgagcg taaaagggtc 2220
 gtcaaacgct aaatctaagt aatgaattga aagttaaag agggggaaga gttggtttgc 2280
 aaaggaaaag tttaaatagc ttaatatcaa tagaatgac ctgaagacag aaaaaacttt 2340
 gtcactcttc ctctctcatt ttctttctct actaaaatgt aatggcatga aaatctctgt 2400
 cgaccaaaaga atataatgta aattaaatcc atgagctcct agtacagcta aagtttgctt 2460
 agtctgaatc actaatattc ctgagttttt tctttctaca agctaactcc ctgcatctgg 2520
 atgcatgatc atctatgcgt cagagcttcc tctttctata atttctctgt atttctctgt gtaaaattgt 2580
 gcatcaggac tgctccatc atttgctgaa aacttcttgt atttctctgt gtaaaattgt 2640
 gcaaacacct acaataaagc catctacttt tagggaaagg gagttgaaaa tgcaaccaac 2700
 tcttggcgaa ctgtacaaac aaatctttgc tatactttat ttcaaataaa ttctttttga 2760
 aatgaaaaaa aaaaaaaa aaaactcgag 2790

<210> 80

<211> 1460

<212> DNA

<213> Homo sapien

<400> 80
 ctcaaagcag ttgagtaggc agaaaaaaga acctcttcat taaggattaa aatgtatagg 60
 ccagcacgtg taacttcgac ttcaagattt ctgaatccat atgtagtatg ttccattgtc 120
 gtgcgagggg tagtgatcct ggcaatcacc atagctctac ttgtttactt tttagctttt 180
 gatcaaaaat cttactttta taggagcagt tttcaactcc taaatgttga atataatagt 240
 cagtttaaatt caccagctac acaggaatac aggactttga gtggaagaat tgaatctctg 300
 attactaaaa cattcaaaga atcaaattta agaaatcagt tcatcagagc tcatgttgcc 360
 aaactgaggc aagatggtag tgggtgtgaga gcggatgttg tcatgaaatt tcaattcact 420
 agaaataaca atggagcatc aatgaaaagc agaattgagt ctgttttacg acaaattgctg 480
 aataactctg gaaacctgga aataaacctt tcaactgaga taacatcact tactgaccag 540
 gctgcagcaa attggcttat taatgaatgt ggggccggtc cagacctaata aacattgtct 600
 gagcagagaa tccttgaggg cactgaggct gaggagggaa gctggccgtg gcaagtcaat 660
 ctgagggtca ataatgccca ccactgtgga ggagagcctga tcaataacat gtggatcctg 720
 acagcagctc actgcttcag aagcaactct aatcctcgtg actggattgc cactctggt 780
 atttcacaaa catttcctaa actaagaatg agagtaagaa atattttaat tcataacaat 840
 tataaatctg caactcatga aatgacatt gcactgtgga gacttgagaa cagtgtcacc 900
 tttaccaaag atatccatag tgtgtgtctc ccagctgcta cccagaatat tccacctggc 960
 tctactgctt atgtaacagg atggggcgct caagaatatg ctggccacac agttccagag 1020
 ctaaggcaag gacagggtcag aataataagt aatgatgtat gtaatgcacc acatagttat 1080
 aatggagcca tcttgtctgg aatgctgtgt gctggagtac ctcaagggtg agtgagcga 1140
 tgtcaggggtg actctgggtg cccactagta caagaagact cacggcggtt ttggtttatt 1200
 gtggggatag taagctgggg agatcagtg ggccctgccg ataagccagg agtgataact 1260
 cgagtgcag cctaccttga ctggattag caacaaactg ggatctagt caacaagtgc 1320
 atccctgttg caaagtctgt atgcaggtgt gcctgtctta aattccaaag ctttacattt 1380
 caactgaaaa agaaactaga aatgtcctaa ttaacatct tgttacataa atatggttta 1440
 acaaaaaaaaa aaaaaaaaaa 1460

<210> 81
 <211> 386
 <212> PRT
 <213> Homo sapien

<400> 81
 Met Phe Ala Glu Ile Gln Ile Gln Asp Lys Asp Arg Met Gly Thr Ala
 1 5 10 15
 Gly Lys Val Ile Lys Cys Lys Ala Ala Val Leu Trp Glu Gln Lys Gln
 20 25 30
 Pro Phe Ser Ile Glu Glu Ile Glu Val Ala Pro Pro Lys Thr Lys Glu
 35 40 45
 Val Arg Ile Lys Ile Leu Ala Thr Gly Ile Cys Arg Thr Asp Asp His
 50 55 60
 Val Ile Lys Gly Thr Met Val Ser Lys Phe Pro Val Ile Val Gly His
 65 70 75 80
 Glu Ala Thr Gly Ile Val Glu Ser Ile Gly Glu Gly Val Thr Thr Val
 85 90 95
 Lys Pro Gly Asp Lys Val Ile Pro Leu Phe Leu Pro Gln Cys Arg Glu
 100 105 110
 Cys Asn Ala Cys Arg Asn Pro Asp Gly Asn Leu Cys Ile Arg Ser Asp
 115 120 125
 Ile Thr Gly Arg Gly Val Leu Ala Asp Gly Thr Thr Arg Phe Thr Cys
 130 135 140
 Lys Gly Lys Pro Val His His Phe Met Asn Thr Ser Thr Phe Thr Glu
 145 150 155 160

Tyr Thr Val Val Asp Glu Ser Ser Val Ala Lys Ile Asp Asp Ala Ala
 165 170 175
 Pro Pro Glu Lys Val Cys Leu Ile Gly Cys Gly Phe Ser Thr Gly Tyr
 180 185 190
 Gly Ala Ala Val Lys Thr Gly Lys Val Lys Pro Gly Ser Thr Cys Val
 195 200 205
 Val Phe Gly Leu Arg Gly Val Gly Leu Ser Val Ile Met Gly Cys Lys
 210 215 220
 Ser Ala Gly Ala Ser Arg Ile Ile Gly Ile Asp Leu Asn Lys Asp Lys
 225 230 235 240
 Phe Glu Lys Ala Met Ala Val Gly Ala Thr Glu Cys Ile Ser Pro Lys
 245 250 255
 Asp Ser Thr Lys Pro Ile Ser Glu Val Leu Ser Glu Met Thr Gly Asn
 260 265 270
 Asn Val Gly Tyr Thr Phe Glu Val Ile Gly His Leu Glu Thr Met Ile
 275 280 285
 Asp Ala Leu Ala Ser Cys His Met Asn Tyr Gly Thr Ser Val Val Val
 290 295 300
 Gly Val Pro Pro Ser Ala Lys Met Leu Thr Tyr Asp Pro Met Leu Leu
 305 310 315 320
 Phe Thr Gly Arg Thr Trp Lys Gly Cys Val Phe Gly Gly Leu Lys Ser
 325 330 335
 Arg Asp Asp Val Pro Lys Leu Val Thr Glu Phe Leu Ala Lys Lys Phe
 340 345 350
 Asp Leu Asp Gln Leu Ile Thr His Val Leu Pro Phe Lys Lys Ile Ser
 355 360 365
 Glu Gly Phe Glu Leu Leu Asn Ser Gly Gln Ser Ile Arg Thr Val Leu
 370 375 380
 Thr Phe
 385

<210> 82
 <211> 418
 <212> PRT
 <213> Homo sapien

<400> 82
 Met Tyr Arg Pro Ala Arg Val Thr Ser Thr Ser Arg Phe Leu Asn Pro
 1 5 10 15
 Tyr Val Val Cys Phe Ile Val Val Ala Gly Val Val Ile Leu Ala Val
 20 25 30
 Thr Ile Ala Leu Leu Val Tyr Phe Leu Ala Phe Asp Gln Lys Ser Tyr
 35 40 45
 Phe Tyr Arg Ser Ser Phe Gln Leu Leu Asn Val Glu Tyr Asn Ser Gln
 50 55 60
 Leu Asn Ser Pro Ala Thr Gln Glu Tyr Arg Thr Leu Ser Gly Arg Ile
 65 70 75 80
 Glu Ser Leu Ile Thr Lys Thr Phe Lys Glu Ser Asn Leu Arg Asn Gln
 85 90 95
 Phe Ile Arg Ala His Val Ala Lys Leu Arg Gln Asp Gly Ser Gly Val
 100 105 110
 Arg Ala Asp Val Val Met Lys Phe Gln Phe Thr Arg Asn Asn Asn Gly
 115 120 125
 Ala Ser Met Lys Ser Arg Ile Glu Ser Val Leu Arg Gln Met Leu Asn

130 135 140
 Asn Ser Gly Asn Leu Glu Ile Asn Pro Ser Thr Glu Ile Thr Ser Leu
 145 150 155 160
 Thr Asp Gln Ala Ala Asn Trp Leu Ile Asn Glu Cys Gly Ala Gly
 165 170 175
 Pro Asp Leu Ile Thr Leu Ser Glu Gln Arg Ile Leu Gly Gly Thr Glu
 180 185 190
 Ala Glu Glu Gly Ser Trp Pro Trp Gln Val Ser Leu Arg Leu Asn Asn
 195 200 205
 Ala His His Cys Gly Gly Ser Leu Ile Asn Asn Met Trp Ile Leu Thr
 210 215 220
 Ala Ala His Cys Phe Arg Ser Asn Ser Asn Pro Arg Asp Trp Ile Ala
 225 230 235 240
 Thr Ser Gly Ile Ser Thr Thr Phe Pro Lys Leu Arg Met Arg Val Arg
 245 250 255
 Asn Ile Leu Ile His Asn Asn Tyr Lys Ser Ala Thr His Glu Asn Asp
 260 265 270
 Ile Ala Leu Val Arg Leu Glu Asn Ser Val Thr Phe Thr Lys Asp Ile
 275 280 285
 His Ser Val Cys Leu Pro Ala Ala Thr Gln Asn Ile Pro Pro Gly Ser
 290 295 300
 Thr Ala Tyr Val Thr Gly Trp Gly Ala Gln Glu Tyr Ala Gly His Thr
 305 310 315 320
 Val Pro Glu Leu Arg Gln Gly Gln Val Arg Ile Ile Ser Asn Asp Val
 325 330 335
 Cys Asn Ala Pro His Ser Tyr Asn Gly Ala Ile Leu Ser Gly Met Leu
 340 345 350
 Cys Ala Gly Val Pro Gln Gly Gly Val Asp Ala Cys Gln Gly Asp Ser
 355 360 365
 Gly Gly Pro Leu Val Gln Glu Asp Ser Arg Arg Leu Trp Phe Ile Val
 370 375 380
 Gly Ile Val Ser Trp Gly Asp Gln Cys Gly Leu Pro Asp Lys Pro Gly
 385 390 395 400
 Val Tyr Thr Arg Val Thr Ala Tyr Leu Asp Trp Ile Arg Gln Gln Thr
 405 410 415
 Gly Ile

<210> 83
 <211> 418
 <212> PRT
 <213> Homo sapien

<400> 83
 Met Tyr Arg Pro Ala Arg Val Thr Ser Thr Ser Arg Phe Leu Asn Pro
 1 5 10 15
 Tyr Val Val Cys Phe Ile Val Val Ala Gly Val Val Ile Leu Ala Val
 20 25 30
 Thr Ile Ala Leu Leu Val Tyr Phe Leu Ala Phe Asp Gln Lys Ser Tyr
 35 40 45
 Phe Tyr Arg Ser Ser Phe Gln Leu Leu Asn Val Glu Tyr Asn Ser Gln
 50 55 60
 Leu Asn Ser Pro Ala Thr Gln Glu Tyr Arg Thr Leu Ser Gly Arg Ile
 65 70 75 80

Glu Ser Leu Ile Thr Lys Thr Phe Lys Glu Ser Asn Leu Arg Asn Gln
 85 90 95
 Phe Ile Arg Ala His Val Ala Lys Leu Arg Gln Asp Gly Ser Gly Val
 100 105 110
 Arg Ala Asp Val Val Met Lys Phe Gln Phe Thr Arg Asn Asn Asn Gly
 115 120 125
 Ala Ser Met Lys Ser Arg Ile Glu Ser Val Leu Arg Gln Met Leu Asn
 130 135 140
 Asn Ser Gly Asn Leu Glu Ile Asn Pro Ser Thr Glu Ile Thr Ser Leu
 145 150 155 160
 Thr Asp Gln Ala Ala Ala Asn Trp Leu Ile Asn Glu Cys Gly Ala Gly
 165 170 175
 Pro Asp Leu Ile Thr Leu Ser Glu Gln Arg Ile Leu Gly Gly Thr Glu
 180 185 190
 Ala Glu Glu Gly Ser Trp Pro Trp Gln Val Ser Leu Arg Leu Asn Asn
 195 200 205
 Ala His His Cys Gly Gly Ser Leu Ile Asn Asn Met Trp Ile Leu Thr
 210 215 220
 Ala Ala His Cys Phe Arg Ser Asn Ser Asn Pro Arg Asp Trp Ile Ala
 225 230 235 240
 Thr Ser Gly Ile Ser Thr Thr Phe Pro Lys Leu Arg Met Arg Val Arg
 245 250 255
 Asn Ile Leu Ile His Asn Asn Tyr Lys Ser Ala Thr His Glu Asn Asp
 260 265 270
 Ile Ala Leu Val Arg Leu Glu Asn Ser Val Thr Phe Thr Lys Asp Ile
 275 280 285
 His Ser Val Cys Leu Pro Ala Ala Thr Gln Asn Ile Pro Pro Gly Ser
 290 295 300
 Thr Ala Tyr Val Thr Gly Trp Gly Ala Gln Glu Tyr Ala Gly His Thr
 305 310 315 320
 Val Pro Glu Leu Arg Gln Gly Gln Val Arg Ile Ile Ser Asn Asp Val
 325 330 335
 Cys Asn Ala Pro His Ser Tyr Asn Gly Ala Ile Leu Ser Gly Met Leu
 340 345 350
 Cys Ala Gly Val Pro Gln Gly Gly Val Asp Ala Cys Gln Gly Asp Ser
 355 360 365
 Gly Gly Pro Leu Val Gln Glu Asp Ser Arg Arg Leu Trp Phe Ile Val
 370 375 380
 Gly Ile Val Ser Trp Gly Asp Gln Cys Gly Leu Pro Asp Lys Pro Gly
 385 390 395 400
 Val Tyr Thr Arg Val Thr Ala Tyr Leu Asp Trp Ile Arg Gln Gln Thr
 405 410 415
 Gly Ile

<210> 84
 <211> 489
 <212> DNA
 <213> Homo sapien

<400> 84
 aaaagggttaa gcttgatgat taccaggaac gaatgaacaa aggggaaagg cttaatcaag 60
 atcagctgga tgccgtttct aagtaccagg aagtcacaaa taatttgagg ttgcaaaaag 120
 aattacagag gaggttcatg gcactaagtc aagatattca gaaaacaata aagaagacag 180

cacgtcggga	gcagcttatg	agagaagaag	ctgaacagaa	acgtttaaaa	actgtacttg	240
agctacagta	tgttttggac	aaattgggag	atgatgaagt	gcggactgac	ctgaaacaag	300
gtttgaatgg	agtgccaata	ttgtccgaag	aggagttgtc	attgttggat	gaattctata	360
agctagtaga	ccctgaacgg	gacatgagct	tgaggttgaa	tgaacagtat	gaacatgcct	420
ccattcacct	gtgggacctg	ctggaaggga	aggaaaaacc	tgtatgtgga	accacctata	480
aagttctaa						489

<210> 85
 <211> 304
 <212> DNA
 <213> Homo sapien

<400> 85						60
gggacctgga	ggaggccacg	ctgcagcatg	aagccacagc	agccaccctg	aggaagaagc	120
acgcggacag	cgtggccgag	ctcggggagc	agatcgacaa	cctgcagcgg	gtgaagcaga	180
agctggagaa	ggagaagagc	gagatgaaga	tggagatcga	tgacctcgct	tgtaacatgg	240
aggatcatctc	caaatctaag	ggaaaccttg	agaagatgtg	ccgcacactg	gaggaccaag	300
tgagtgaagt	gaagaccag	gaggaggaac	agcagcggct	gatcaatgaa	ctgactgcgc	304
agag						

<210> 86
 <211> 296
 <212> DNA
 <213> Homo sapien

<400> 86						60
gaaaatcctt	cctttgaatg	ggaatctcca	agcagttgaa	ttgggcgaaa	aaagaacctc	120
ttccttaagg	attaaaatgt	ttagggcaac	acgtgttact	tccacttcca	gattttctgaa	180
tccatatgtt	gtatgtttcc	ttgtcctccc	aggggttggtg	atcctggcag	tcccatagc	240
tctacttggt	tacttttttag	cttttgatca	aaaatcttac	ttttattgga	gcaattttcc	296
actoccaa	ggtgaatata	atagtcggtt	taattccccc	gcttcaccgg	gaattc	

<210> 87
 <211> 904
 <212> DNA
 <213> Homo sapien

<400> 87						60
gtgtccagga	aacgattcat	gaacataaca	agcttgctgc	aaattcagat	catctcatgc	120
agattcaaaa	atgtgagttg	gtcttgatcc	acacctaccc	agttggtgaa	gacagccttg	180
tatctgatcg	ttctaaaaaa	gagttgtccc	cggttttaac	cagtgaagtt	catagtgttc	240
gtgcaggacg	gcatcttgct	accaaattga	atattttagt	acagcaacat	tttgacttgg	300
cttcaactac	tattacaaat	attccaatga	aggaagaaca	gcatgctaac	acatctgcca	360
attatgatgt	ggagctactt	catcacaag	atgcacatgt	agatttcctg	aaaagtgggtg	420
attcgcatct	aggtggcggc	agtcgagaag	gctcgtttta	agaaacaata	acattaaagt	480
ggtgtacacc	aaggacaaat	aacattgaat	tacactattg	tactggagct	tatcggattt	540
cacctgtaga	tgtaaatagt	agaccttcct	cctgccttac	taattttcct	ctaaatgggtc	600
gttctgtttt	attggaacaa	ccacgaaagt	caggttctaa	agtcattagt	catatgctta	660
gtagccatgg	aggagagatt	tttttgcacg	tccttagcag	ttctcgatcc	attctagaag	720
atccaccttc	aattagttaa	ggatgtggag	gaagagttac	agactaccgg	attacagatt	780
ttggtgaatt	tatgagggga	aaacagatta	actccttttc	tacaccccag	atataaaatc	840
gatggaagtc	ttgaggtccc	tttggaaaccg	agccaaaaga	tcagttaaaa	aaacataccc	900
gttactggcc	tatgatttca	aaaacccacc	atttttaaca	tgcaagcggg	agttccgtta	904
acca						

<210> 88
 <211> 387
 <212> DNA
 <213> Homo sapien

<400> 88
 cgtctctccc ccagtttgcc gttcaccocgg agcgcctcggg acttgccgat agtgggtgacg 60
 gcggcaacat gtctgtggct ttcgcggccc cgaggcagcg aggcaagggg gagatcactc 120
 ccgctgcatg tcagaagatg ttggatgaca ataaccatct tattcagtgt ataattggact 180
 ctcaagaataa aggaagacc tcagagtgtt ctcaagtatca gcagatgttg cacacaaact 240
 tggatatacct tgctacaata gcagattcta atcaaaatat gcagtctctt ttaccagcac 300
 caccacacaca gaatatgcct atgggtcctg gagggatgaa tcagagcggg cctccccac 360
 ctccacgctc tcacaacatg ccttcaa 387

<210> 89
 <211> 481
 <212> DNA
 <213> Homo sapien

<400> 89
 tgttcttggg cctgcgggtgc tatagagcag gctcttctag gttggcagtt gccatggaat 60
 ctggacccaa aatgttggcc cccgtttgcc tgggtggaaa taacaatgag cagctattgg 120
 tgaaccagca agctatacag attcttgaaa agatttctca gccagtgggtg gtgggtggcca 180
 ttgtaggact gtaccgtaca gggaaatcct acttgatgaa ccactctggca ggacagaatc 240
 atggcttccc tctgggtccc acggtgcagt ctgaaaccaa gggcatctgg atgtgggtgcg 300
 tgccccaccc atccaagcca aaccacaccc tggtccttct ggacaccgaa ggtctgggag 360
 atgtggaaaa ggggtgacct aagaatgact cctggatctt tgccctggct gtgctcctgt 420
 gcagcacctt tgtctacaac agcatgagca ccatcaacca ccaggccctg gagcagctgc 480
 a 481

<210> 90
 <211> 491
 <212> DNA
 <213> Homo sapien

<400> 90
 tgaaaaactgt tcttggacct gcggtgctat agagcaggtt ggcagttgcc atggaatctg 60
 gacccaaaat gttggccccc gtttgcctgg tggaaaataa caatgagcag ctattgggtga 120
 accagcaagc tatacagatt cttgaaaaga tttctcagcc agtgggtgggtg gtggccattg 180
 taggactgta ccgtacaggg aaatcctact tgatgaacca tctggcagga cagaatcatg 240
 gcttccctct gggctccacg gtgcagtcgt aaaccaaggg catctggatg tgggtgcgtgc 300
 cccacccatc caagccaaac cacaccctgg tccttctgga caccgaaggc ctgggagatg 360
 tggaaaaggg tgaccctaag aatgactcct ggatctttgc cctggctgtg ctctgtgca 420
 gcacctttgt ctacaacagc atgagcacca tcaaccacca agccctggag cagctgcatt 480
 atgtgacgga c 491

<210> 91
 <211> 488
 <212> DNA
 <213> Homo sapien

<400> 91
 ttgcagagtc agccgcatct tcttttgcgt cgccagccga gccacatcgc tcagacacca 60

tggggaaggt gaaggtcgga gtcaacggat ttgggtcgat tgggcgcctg gtcaccaggg 120
 ctgcttttaa ctctggtaaa gtggatattg ttgccatcaa tgacccttc attgacctca 180
 actacatggt ttacatgttc caatatgatt ccacccatgg caaattccat ggcaccgtcg 240
 aggctgagaa cggaagcctt gtcacatg gaaatcccat caccatcttc caggagcgag 300
 atccctccaa aatcaagtgg ggcgatgctg gcgctgagta cgtcgtggag tccactggcg 360
 tcttcaccac catggagaag gctggggctc atttgacagg gggagccaaa aggggtcatca 420
 tctctgccc tctgctgatg ccccatgttc gtcatgggtg tgaacatga gaagtatgac 480
 acagcctc 488

<210> 92
 <211> 384
 <212> DNA
 <213> Homo sapien

<400> 92
 gacagtcagc cgcattcttct tttgcgtcgc cagccgagcc acatcgctca gacaccatgg 60
 ggaaggtgaa ggtcggagtc aacggatttg gtcgtattgg gcgcctggtc accagggctg 120
 cttttaactc tggtaaagtg gatattgttg ccatcaatga ccccttcatt gacctcaact 180
 acatggttta catgttccaa tatgattcca cccatggcaa attccatggc accgtcgagg 240
 ctgagaacgg gaagcttgtc atcaatggaa atcccatcac catcttccag gagcgagatc 300
 cctccaaaat caagtggggc gatactggcg ctgagtacgt cgtggagtcc actggcgtct 360
 tcaccaccat ggagaaggct gggg 384

<210> 93
 <211> 162
 <212> PRT
 <213> Homo sapien

<400> 93
 Lys Gly Lys Leu Asp Asp Tyr Gln Glu Arg Met Asn Lys Gly Glu Arg
 1 5 10 15
 Leu Asn Gln Asp Gln Leu Asp Ala Val Ser Lys Tyr Gln Glu Val Thr
 20 25 30
 Asn Asn Leu Glu Phe Ala Lys Glu Leu Gln Arg Ser Phe Met Ala Leu
 35 40 45
 Ser Gln Asp Ile Gln Lys Thr Ile Lys Lys Thr Ala Arg Arg Glu Gln
 50 55 60
 Leu Met Arg Glu Glu Ala Glu Gln Lys Arg Leu Lys Thr Val Leu Glu
 65 70 75 80
 Leu Gln Tyr Val Leu Asp Lys Leu Gly Asp Asp Glu Val Arg Thr Asp
 85 90 95
 Leu Lys Gln Gly Leu Asn Gly Val Pro Ile Leu Ser Glu Glu Glu Leu
 100 105 110
 Ser Leu Leu Asp Glu Phe Tyr Lys Leu Val Asp Pro Glu Arg Asp Met
 115 120 125
 Ser Leu Arg Leu Asn Glu Gln Tyr Glu His Ala Ser Ile His Leu Trp
 130 135 140
 Asp Leu Leu Glu Gly Lys Glu Lys Pro Val Cys Gly Thr Thr Tyr Lys
 145 150 155 160
 Val Leu

<210> 94
 <211> 100

<212> PRT

<213> Homo sapien

<400> 94
 Asp Leu Glu Glu Ala Thr Leu Gln His Glu Ala Thr Ala Ala Thr Leu
 1 5 10 15
 Arg Lys Lys His Ala Asp Ser Val Ala Glu Leu Gly Glu Gln Ile Asp
 20 25 30
 Asn Leu Gln Arg Val Lys Gln Lys Leu Glu Lys Glu Lys Ser Glu Met
 35 40 45
 Lys Met Glu Ile Asp Asp Leu Ala Cys Asn Met Glu Val Ile Ser Lys
 50 55 60
 Ser Lys Gly Asn Leu Glu Lys Met Cys Arg Thr Leu Glu Asp Gln Val
 65 70 75 80
 Ser Glu Leu Lys Thr Gln Glu Glu Glu Gln Gln Arg Leu Ile Asn Glu
 85 90 95
 Leu Thr Ala Gln
 100

<210> 95

<211> 99

<212> PRT

<213> Homo sapien

<400> 95
 Lys Ile Leu Pro Leu Asn Gly Asn Leu Gln Ala Val Glu Leu Gly Glu
 1 5 10 15
 Lys Arg Thr Ser Ser Leu Arg Ile Lys Met Phe Arg Ala Thr Arg Val
 20 25 30
 Thr Ser Thr Ser Arg Phe Leu Asn Pro Tyr Val Val Cys Phe Leu Val
 35 40 45
 Leu Pro Gly Val Val Ile Leu Ala Val Pro Ile Ala Leu Leu Val Tyr
 50 55 60
 Phe Leu Ala Phe Asp Gln Lys Ser Tyr Phe Tyr Trp Ser Asn Phe Pro
 65 70 75 80
 Leu Pro Asn Val Glu Tyr Asn Ser Pro Phe Asn Ser Pro Ala Ser Pro
 85 90 95
 Gly Ile Pro

<210> 96

<211> 257

<212> PRT

<213> Homo sapien

<400> 96
 Val Gln Glu Thr Ile His Glu His Asn Lys Leu Ala Ala Asn Ser Asp
 1 5 10 15
 His Leu Met Gln Ile Gln Lys Cys Glu Leu Val Leu Ile His Thr Tyr
 20 25 30
 Pro Val Gly Glu Asp Ser Leu Val Ser Asp Arg Ser Lys Lys Glu Leu
 35 40 45
 Ser Pro Val Leu Thr Ser Glu Val His Ser Val Arg Ala Gly Arg His
 50 55 60

Leu Ala Thr Lys Leu Asn Ile Leu Val Gln Gln His Phe Asp Leu Ala
 65 70 75 80
 Ser Thr Thr Ile Thr Asn Ile Pro Met Lys Glu Glu Gln His Ala Asn
 85 90 95
 Thr Ser Ala Asn Tyr Asp Val Glu Leu His His Lys Asp Ala His
 100 105 110
 Val Asp Phe Leu Lys Ser Gly Asp Ser His Leu Gly Gly Gly Ser Arg
 115 120 125
 Glu Gly Ser Phe Lys Glu Thr Ile Thr Leu Lys Trp Cys Thr Pro Arg
 130 135 140
 Thr Asn Asn Ile Glu Leu His Tyr Cys Thr Gly Ala Tyr Arg Ile Ser
 145 150 155 160
 Pro Val Asp Val Asn Ser Arg Pro Ser Ser Cys Leu Thr Asn Phe Leu
 165 170 175
 Leu Asn Gly Arg Ser Val Leu Leu Glu Gln Pro Arg Lys Ser Gly Ser
 180 185 190
 Lys Val Ile Ser His Met Leu Ser Ser His Gly Gly Glu Ile Phe Leu
 195 200 205
 His Val Leu Ser Ser Ser Arg Ser Ile Leu Glu Asp Pro Pro Ser Ile
 210 215 220
 Ser Glu Gly Cys Gly Gly Arg Val Thr Asp Tyr Arg Ile Thr Asp Phe
 225 230 235 240
 Gly Glu Phe Met Arg Gly Lys Gln Ile Asn Ser Phe Ser Thr Pro Gln
 245 250 255
 Ile

<210> 97
 <211> 128
 <212> PRT
 <213> Homo sapien

<400> 97
 Ser Leu Pro Gln Phe Ala Val His Pro Glu Arg Ser Gly Leu Ala Asp
 1 5 10 15
 Ser Gly Asp Gly Gly Asn Met Ser Val Ala Phe Ala Ala Pro Arg Gln
 20 25 30
 Arg Gly Lys Gly Glu Ile Thr Pro Ala Ala Ile Gln Lys Met Leu Asp
 35 40 45
 Asp Asn Asn His Leu Ile Gln Cys Ile Met Asp Ser Gln Asn Lys Gly
 50 55 60
 Lys Thr Ser Glu Cys Ser Gln Tyr Gln Gln Met Leu His Thr Asn Leu
 65 70 75 80
 Val Tyr Leu Ala Thr Ile Ala Asp Ser Asn Gln Asn Met Gln Ser Leu
 85 90 95
 Leu Pro Ala Pro Pro Thr Gln Asn Met Pro Met Gly Pro Gly Gly Met
 100 105 110
 Asn Gln Ser Gly Pro Pro Pro Pro Pro Arg Ser His Asn Met Pro Ser
 115 120 125

<210> 98
 <211> 159
 <212> PRT
 <213> Homo sapien

<400> 98
 Phe Leu Asp Leu Arg Cys Tyr Arg Ala Gly Ser Ser Arg Leu Ala Val
 1 5 10 15
 Ala Met Glu Ser Gly Pro Lys Met Leu Ala Pro Val Cys Leu Val Glu
 20 25 30
 Asn Asn Asn Glu Gln Leu Leu Val Asn Gln Gln Ala Ile Gln Ile Leu
 35 40 45
 Glu Lys Ile Ser Gln Pro Val Val Val Ala Ile Val Gly Leu Tyr
 50 55 60
 Arg Thr Gly Lys Ser Tyr Leu Met Asn His Leu Ala Gly Gln Asn His
 65 70 75 80
 Gly Phe Pro Leu Gly Ser Thr Val Gln Ser Glu Thr Lys Gly Ile Trp
 85 90 95
 Met Trp Cys Val Pro His Pro Ser Lys Pro Asn His Thr Leu Val Leu
 100 105 110
 Leu Asp Thr Glu Gly Leu Gly Asp Val Glu Lys Gly Asp Pro Lys Asn
 115 120 125
 Asp Ser Trp Ile Phe Ala Leu Ala Val Leu Leu Cys Ser Thr Phe Val
 130 135 140
 Tyr Asn Ser Met Ser Thr Ile Asn His Gln Ala Leu Glu Gln Leu
 145 150 155

<210> 99
 <211> 147
 <212> PRT
 <213> Homo sapien

<400> 99
 Met Glu Ser Gly Pro Lys Met Leu Ala Pro Val Cys Leu Val Glu Asn
 1 5 10 15
 Asn Asn Glu Gln Leu Leu Val Asn Gln Gln Ala Ile Gln Ile Leu Glu
 20 25 30
 Lys Ile Ser Gln Pro Val Val Val Val Ala Ile Val Gly Leu Tyr Arg
 35 40 45
 Thr Gly Lys Ser Tyr Leu Met Asn His Leu Ala Gly Gln Asn His Gly
 50 55 60
 Phe Pro Leu Gly Ser Thr Val Gln Ser Glu Thr Lys Gly Ile Trp Met
 65 70 75 80
 Trp Cys Val Pro His Pro Ser Lys Pro Asn His Thr Leu Val Leu Leu
 85 90 95
 Asp Thr Glu Gly Leu Gly Asp Val Glu Lys Gly Asp Pro Lys Asn Asp
 100 105 110
 Ser Trp Ile Phe Ala Leu Ala Val Leu Leu Cys Ser Thr Phe Val Tyr
 115 120 125
 Asn Ser Met Ser Thr Ile Asn His Gln Ala Leu Glu Gln Leu His Tyr
 130 135 140
 Val Thr Asp
 145

<210> 100
 <211> 124
 <212> PRT
 <213> Homo sapien

<400> 100
 Met Gly Lys Val Lys Val Gly Val Asn Gly Phe Gly Arg Ile Gly Arg
 1 5 10 15
 Leu Val Thr Arg Ala Ala Phe Asn Ser Gly Lys Val Asp Ile Val Ala
 20 25 30
 Ile Asn Asp Pro Phe Ile Asp Leu Asn Tyr Met Val Tyr Met Phe Gln
 35 40 45
 Tyr Asp Ser Thr His Gly Lys Phe His Gly Thr Val Glu Ala Glu Asn
 50 55 60
 Gly Lys Leu Val Ile Asn Gly Asn Pro Ile Thr Ile Phe Gln Glu Arg
 65 70 75 80
 Asp Pro Ser Lys Ile Lys Trp Gly Asp Ala Gly Ala Glu Tyr Val Val
 85 90 95
 Glu Ser Thr Gly Val Phe Thr Thr Met Glu Lys Ala Gly Ala His Leu
 100 105 110
 Gln Gly Gly Ala Lys Arg Val Ile Ile Ser Ala Pro
 115 120

<210> 101
 <211> 127
 <212> PRT
 <213> Homo sapien

<400> 101
 Gln Ser Ala Ala Ser Ser Phe Ala Ser Pro Ala Glu Pro His Arg Ser
 1 5 10 15
 Asp Thr Met Gly Lys Val Lys Val Gly Val Asn Gly Phe Gly Arg Ile
 20 25 30
 Gly Arg Leu Val Thr Arg Ala Ala Phe Asn Ser Gly Lys Val Asp Ile
 35 40 45
 Val Ala Ile Asn Asp Pro Phe Ile Asp Leu Asn Tyr Met Val Tyr Met
 50 55 60
 Phe Gln Tyr Asp Ser Thr His Gly Lys Phe His Gly Thr Val Glu Ala
 65 70 75 80
 Glu Asn Gly Lys Leu Val Ile Asn Gly Asn Pro Ile Thr Ile Phe Gln
 85 90 95
 Glu Arg Asp Pro Ser Lys Ile Lys Trp Gly Asp Thr Gly Ala Glu Tyr
 100 105 110
 Val Val Glu Ser Thr Gly Val Phe Thr Thr Met Glu Lys Ala Gly
 115 120 125

<210> 102
 <211> 1225
 <212> DNA
 <213> Homo sapien

<400> 102
 atggcggcgc ggtcgctgctc ggggggtggcg gcggcagagg gggcggcggc cctggcgcca 60
 gcggagacgc cagccgtgac ggtggcagcg gcggcgcggg acctgggcct gggggaatga 120
 ggcgccgcgc gcgggccagc ggcggagccg tgtagcggag aagctcccc tccctgcttc 180
 ccttggccga gccgggggcg cgcgcgcacg cgcccgccca gagcgggctc cccaccctc 240
 gactcctgcg acccgaccg cacccccacc cgggcccga gcatgatgaa gctcaagtcg 300
 aaccagaccc gcacctacga cggcgacggc tacaagaagc gggccgcgatg cctgtgtttc 360

cgacgcgaga	gcgaggagga	ggtgctactc	gtgagcagta	gtcgccatcc	agacagatgg	420
attgtccctg	gaggaggcat	ggagcccag	gaggagccaa	gtgtggcagc	agttcgtgaa	480
gtctgtgagg	aggctggagt	aaaagggaca	ttgggaagat	tagttggaat	ttttgagaac	540
caggagagga	agcacaggac	gtatgtctat	gtgctcattg	tcactgaagt	gctggaagac	600
tgggaagatt	cagttaacat	tggaaaggaag	agggaatggt	ttaaaataga	agacgccata	660
aaagtgtctg	agtatcacia	acccgtgcag	gcatcatatt	ttgaaacatt	gaggcaaggc	720
tactcagcca	acaatggcac	cccagtcgtg	gccaccacat	actcggtttc	tgctcagagc	780
tcgatgtcag	gcatcagatg	actgaagact	tccgtgaaga	gaaatggaaa	ttggaaacta	840
gactgaagtg	caaattcttc	ctctcaccct	ggctctttcc	acttctcaca	ggcctcctct	900
ttcaaataag	gcatgggtggg	cagcaaagaa	agggtgtatt	gataatgttg	ctgtttgggtg	960
ttaagtgatg	gggctttttc	ttctgttttt	attgaggggtg	ggggttggtg	gtgtaatttg	1020
taagtacttt	tgtgcatgat	ctgtccctcc	ctctccccc	ccctgcagtc	ctctgaagag	1080
aggccaacag	ccttcccctg	ccttggattc	tgaagtgttc	ctgtttgtct	tatcctggcc	1140
ctggccagac	gttttctttg	atttttaatt	ttttttttt	attaaaagat	accagtatga	1200
gaaaaaaaaa	aaaaaaaaac	tcgag				1225

<210> 103
 <211> 741
 <212> DNA
 <213> Homo sapien

<400> 103						60
agaaacctca	atcggtattca	gcaaaggaat	ggtgttatta	tcactacata	ccaaatgtta	120
atcaataact	ggcagcaact	ttcaagcttt	agggggccaag	agtttgtgtg	ggactatgtc	180
atcctcgatg	aagcacataa	aataaaaaacc	tcatctacta	agtcagcaat	atgtgtctgt	240
gactattcctg	caagtaatcg	cctcctcctc	acaggaaccc	caatccagaa	taattttaca	300
gaactatggt	ccctatttga	ttttgcttgt	caagggtccc	tgctgggaac	attaaaaact	360
tttaagatgg	agtatgaaaa	tcctattact	agagcaagag	agaaggatgc	taccccagga	420
gaaaaagcct	tgggatttaa	aatatctgaa	aacttaattg	caatcataaa	accctatttt	480
ctcaggagga	ctaaagaaga	cgtacagaag	aaaaagtcaa	gcaaccaga	ggccagactt	540
aatgaaaaga	atccagatgt	tgtgaaatgc	cttccctttc	caggagaaat		600
gatttaatta	tttggatacg	acttgtgcct	ttacaagaag	aaatatacag	gaaattttgtg	660
tctttagatc	atatcaagga	gttgctaata	gagacgcgct	cacctttggc	tgagctaggt	720
gtcttaaaaga	agctgtgtga	tcctcctagg	ctgctgtctg	cacgggcttg	ttgtttgcta	741
aatcttgga	cattctctgc	t				

<210> 104
 <211> 321
 <212> DNA
 <213> Homo sapien

<400> 104						60
ttgctctgcg	tcataaaaga	caccaaactg	ctgtgctata	aaagttccaa	ggaccagcag	120
cctcagatgg	aactgccact	ccaaggctgt	aacattacgt	acatcccga	agacagcaaa	180
aagaagaagc	acgagctgaa	gattactcag	cagggcacgg	acccgcttgt	tctcgccgtc	240
cagagcaagg	aacaggccga	gcagtggctg	aagggtgatca	agaagccta	cagtgtgtgt	300
agtggccccg	tggattcaga	gtgtcctcct	ccaccaagct	ccccgggtgca	caaggcagaa	321
ctggagaaga	aactgtcttc	a				

<210> 105
 <211> 389
 <212> DNA
 <213> Homo sapien

<400> 105
 cagcactggc cacactataa aattcaggtt cagaaaaaca gggtaagtca cagacagcaa 60
 cgcttccagc atttattttc ttgtcaccca tgggcaattt gagaaaattt accttttaga 120
 cgaactctgt taaaggatca gacagtacaa tactttttat tcagaagggt tctgcataaa 180
 ggtgatagtc ttttgactta atatattatt gtctcctgcc ttgtgtttct ggaatgaatg 240
 aaggtcatta tttagaagat aatctgggtt gtatttgtgt cgtcagattg aattttcatt 300
 gcacatgcta cttaatgtct ttaccaaata ataacaagg gaaagaaaac caaatataga 360
 tgtataataa ggaaaagctg gcctataga 389

<210> 106
 <211> 446
 <212> DNA
 <213> Homo sapien

<400> 106
 gccacatttg ccttggtcat agtttaaaca ccaggtcctg tgtcacatct ttttgggtgcc 60
 acaagtatca ctccattgtt cagagagtaa tgtattagtt ctgcccaatt cattcttcac 120
 ttttatttct tccatttcat tagcatttat atcagctcaa gaagttaagg ttagaaaatt 180
 ttccacttca aattttcagt acagaaatgt gctgtgatgt ttgacaagac tatttcatag 240
 taagtgaagt aatgtttatt ggctctgtct ctctctgtg tcagacctag gaagcctgag 300
 gattacttag ttgttctgtc tctgggtcca caggcagaat ttggcccatc caaagactgg 360
 ccaagtgcc aaaaaaggcc tgattaggcc ctgaaattca gtgaaattct gcctgaagaa 420
 acctcttatt gaatttgaaa accata 446

<210> 107
 <211> 467
 <212> DNA
 <213> Homo sapien

<400> 107
 ccgcccgtgc cgtcgccttc ctgggattgg agtctcgagc tttcttcggt cgttcgccgg 60
 cgggttcgag cccttctcgc gcctcggggc tgcgaggctg gggaaggggt tggagggggc 120
 tgttgatcgc cgcgtttaag ttgcgctcgg ggcggccatg tcggccggcg aggtcgagcg 180
 cctagtgtcg gagctgagcg gcgggaccgg aggggatgag gaggaagagt ggctctatgg 240
 cgatgaagat gaagttgaaa ggccagaaga agaaaatgcc agtgctaate ctccatctgg 300
 aattgaagat gaaactgctg aaaatgggtg accaaaaccg aaagtgactg agaccgaaga 360
 tgatagtgat agtgacagcg atgatgatga agatgatgtg catgtcacta taggagacat 420
 taaaacggga gcaccacagt atgggagtta tggtagagca cctgtaa 467

<210> 108
 <211> 491
 <212> DNA
 <213> Homo sapien

<400> 108
 gaaagataca acttcccca cccaaaccgg tttgtggagg acgacatgga taagaatgaa 60
 atcgctctg ttgcgtaccg ttaccgcagg tggagcttg gagatgatat tgaccttatt 120
 gtccgttgtg agcacgatgg cgtcatgact ggagccaacg gggaagtgtc cttcatcaac 180
 atcaagacac tcaatgagtg ggattccagg cactgtaatg gcgttgactg gcgtcagaag 240
 ctggactctc agcgagggggc tgtcattgcc acggagctga agaacaacag ctacaagttg 300
 gcccggtgga cctgctgtgc tttgctggct ggatctgagt acctcaagct tggttatgtg 360
 tctcggtacc acgtgaaaga ctctcacgc cactgcatcc taggcacca gcagttcaag 420
 cctaagtgtg ttgccagcca gatcaacctg agcgtggaga atgcctgagg cattttacgc 480
 tgcgtcattg a 491

<210> 109
 <211> 489
 <212> DNA
 <213> Homo sapien

<400> 109
 ctccagatagt actgaaccct ttatcaacta tgttttttca gtctgacaac caaggcggct 60
 actaagtac taaggggcag gtagtatata gtgtggataa gcaggacaaa ggggtgattc 120
 acatcccagg caggacagag caggagatca tgagatttca tcactcagga tggcttgga 180
 tttattttat tttattcttt ttttttttgg agatggagtc tcactcttgc ccaggctgga 240
 gtgcagtggt gcgatcttgg ctcaactgcaa cctctgcctc ctgggttcaa gcagttctcc 300
 tgcctcagcc tcccagtag ctgggattac aggcgtccgc caccatgccc agccaatttt 360
 tgtactttta gtagagatgg ggtttcacca tgttgccag gctggtctcg aactcctgac 420
 ctccaggtgat ccactcgcct cggcctccca aagtgtctgg attataggca tgcgccacca 480
 tgcccgggc 489

<210> 110
 <211> 391
 <212> DNA
 <213> Homo sapien

<400> 110
 gggaggtccg ctggctgacc cgagcgtctg tctccgccgg gaaccctggg gcatggagag 60
 gtctgagtag ctccggccgc gcgcacgctg catcgccggg ccaggctgcc gctgtcccag 120
 tggagttcca ggagcaccac ctgagtgagg tgcagaatat ggcactctgag gagaagctgg 180
 agcaggtgct gagttccatg aaggagaaca aagtggccat cattggaaaag attcataccc 240
 cgatggagta taagggggag ctagcctcct atgatatgcg gctgaggcgt aagttggact 300
 tatttgccaa cgtaatccat gtgaagtcac ttcctgggta tatgactcgg cacaacaatc 360
 tagacctggt gatcattcga gagcagacag a 391

<210> 111
 <211> 172
 <212> PRT
 <213> Homo sapien

<400> 111
 Met Met Lys Leu Lys Ser Asn Gln Thr Arg Thr Tyr Asp Gly Asp Gly
 1 5 10 15
 Tyr Lys Lys Arg Ala Ala Cys Leu Cys Phe Arg Ser Glu Ser Glu Glu
 20 25 30
 Glu Val Leu Leu Val Ser Ser Ser Arg His Pro Asp Arg Trp Ile Val
 35 40 45
 Pro Gly Gly Gly Met Glu Pro Glu Glu Glu Pro Ser Val Ala Ala Val
 50 55 60
 Arg Glu Val Cys Glu Glu Ala Gly Val Lys Gly Thr Leu Gly Arg Leu
 65 70 75 80
 Val Gly Ile Phe Glu Asn Gln Glu Arg Lys His Arg Thr Tyr Val Tyr
 85 90 95
 Val Leu Ile Val Thr Glu Val Leu Glu Asp Trp Glu Asp Ser Val Asn
 100 105 110
 Ile Gly Arg Lys Arg Glu Trp Phe Lys Ile Glu Asp Ala Ile Lys Val
 115 120 125
 Leu Gln Tyr His Lys Pro Val Gln Ala Ser Tyr Phe Glu Thr Leu Arg

130 135 140
 Gln Gly Tyr Ser Ala Asn Asn Gly Thr Pro Val Val Ala Thr Thr Tyr
 145 150 155 160
 Ser Val Ser Ala Gln Ser Ser Met Ser Gly Ile Arg
 165 170

<210> 112
 <211> 247
 <212> PRT
 <213> Homo sapien

<400> 112
 Arg Asn Leu Asn Arg Ile Gln Gln Arg Asn Gly Val Ile Ile Thr Thr
 1 5 10 15
 Tyr Gln Met Leu Ile Asn Asn Trp Gln Gln Leu Ser Ser Phe Arg Gly
 20 25 30
 Gln Glu Phe Val Trp Asp Tyr Val Ile Leu Asp Glu Ala His Lys Ile
 35 40 45
 Lys Thr Ser Ser Thr Lys Ser Ala Ile Cys Ala Arg Ala Ile Pro Ala
 50 55 60
 Ser Asn Arg Leu Leu Leu Thr Gly Thr Pro Ile Gln Asn Asn Leu Gln
 65 70 75 80
 Glu Leu Trp Ser Leu Phe Asp Phe Ala Cys Gln Gly Ser Leu Leu Gly
 85 90 95
 Thr Leu Lys Thr Phe Lys Met Glu Tyr Glu Asn Pro Ile Thr Arg Ala
 100 105 110
 Arg Glu Lys Asp Ala Thr Pro Gly Glu Lys Ala Leu Gly Phe Lys Ile
 115 120 125
 Ser Glu Asn Leu Met Ala Ile Ile Lys Pro Tyr Phe Leu Arg Arg Thr
 130 135 140
 Lys Glu Asp Val Gln Lys Lys Ser Ser Asn Pro Glu Ala Arg Leu
 145 150 155 160
 Asn Glu Lys Asn Pro Asp Val Asp Ala Ile Cys Glu Met Pro Ser Leu
 165 170 175
 Ser Arg Arg Asn Asp Leu Ile Ile Trp Ile Arg Leu Val Pro Leu Gln
 180 185 190
 Glu Glu Ile Tyr Arg Lys Phe Val Ser Leu Asp His Ile Lys Glu Leu
 195 200 205
 Leu Met Glu Thr Arg Ser Pro Leu Ala Glu Leu Gly Val Leu Lys Lys
 210 215 220
 Leu Cys Asp His Pro Arg Leu Leu Ser Ala Arg Ala Cys Cys Leu Leu
 225 230 235 240
 Asn Leu Gly Thr Phe Ser Ala
 245

<210> 113
 <211> 107
 <212> PRT
 <213> Homo sapien

<400> 113
 Leu Leu Cys Val Ile Lys Asp Thr Lys Leu Leu Cys Tyr Lys Ser Ser
 1 5 10 15
 Lys Asp Gln Gln Pro Gln Met Glu Leu Pro Leu Gln Gly Cys Asn Ile

20 25 30
 Thr Tyr Ile Pro Lys Asp Ser Lys Lys Lys Lys His Glu Leu Lys Ile
 35 40 45
 Thr Gln Gln Gly Thr Asp Pro Leu Val Leu Ala Val Gln Ser Lys Glu
 50 55 60
 Gln Ala Glu Gln Trp Leu Lys Val Ile Lys Glu Ala Tyr Ser Gly Cys
 65 70 75 80
 Ser Gly Pro Val Asp Ser Glu Cys Pro Pro Pro Pro Ser Ser Pro Val
 85 90 95
 His Lys Ala Glu Leu Glu Lys Lys Leu Ser Ser
 100 105

<210> 114
 <211> 155
 <212> PRT
 <213> Homo sapien

<400> 114
 Glu Arg Tyr Asn Phe Pro Asn Pro Asn Pro Phe Val Glu Asp Asp Met
 1 5 10 15
 Asp Lys Asn Glu Ile Ala Ser Val Ala Tyr Arg Tyr Arg Arg Trp Lys
 20 25 30
 Leu Gly Asp Asp Ile Asp Leu Ile Val Arg Cys Glu His Asp Gly Val
 35 40 45
 Met Thr Gly Ala Asn Gly Glu Val Ser Phe Ile Asn Ile Lys Thr Leu
 50 55 60
 Asn Glu Trp Asp Ser Arg His Cys Asn Gly Val Asp Trp Arg Gln Lys
 65 70 75 80
 Leu Asp Ser Gln Arg Gly Ala Val Ile Ala Thr Glu Leu Lys Asn Asn
 85 90 95
 Ser Tyr Lys Leu Ala Arg Trp Thr Cys Cys Ala Leu Leu Ala Gly Ser
 100 105 110
 Glu Tyr Leu Lys Leu Gly Tyr Val Ser Arg Tyr His Val Lys Asp Ser
 115 120 125
 Ser Arg His Val Ile Leu Gly Thr Gln Gln Phe Lys Pro Asn Glu Phe
 130 135 140
 Ala Ser Gln Ile Asn Leu Ser Val Glu Asn Ala
 145 150 155

<210> 115
 <211> 129
 <212> PRT
 <213> Homo sapien

<400> 115
 Gly Val Arg Trp Leu Thr Arg Ala Leu Val Ser Ala Gly Asn Pro Gly
 1 5 10 15
 Ala Trp Arg Gly Leu Ser Thr Ser Ala Ala Ala His Ala Ala Ser Arg
 20 25 30
 Ser Gln Ala Ala Ala Val Pro Val Glu Phe Gln Glu His His Leu Ser
 35 40 45
 Glu Val Gln Asn Met Ala Ser Glu Glu Lys Leu Glu Gln Val Leu Ser
 50 55 60
 Ser Met Lys Glu Asn Lys Val Ala Ile Ile Gly Lys Ile His Thr Pro

```
<210> 116
<211> 550
<212> DNA
<213> Homo sapien
```

```
<210> 117
<211> 154
<212> DNA
<213> Homo sapien
```

```
<210> 118
<211> 449
<212> DNA
<213> Homo sapien
```

$$\begin{array}{ll} \langle 210 \rangle & 119 \\ \langle 211 \rangle & 642 \end{array}$$

<212> DNA

<213> Homo sapien

<400> 119
 gaattcggca cgagcagtaa cccgaccgcc gctggtcttc gctggacacc atgaatcaca 60
 ctgtccaaac cttcttctct cctgtcaaca gtggccagcc ccccaactat gagatgctca 120
 aggaggagca cgaggtggct gtgctggggg cgccccacaa ccctgctccc ccgacgtcca 180
 ccgtgatcca catccgcagc gagacctccg tgcccgacca tgctgctggtg tccctgttca 240
 acaccctctt catgaacccc tgctgcctgg gcttcatagc attgcctac tccgtgaagt 300
 ctaggggacag gaagatgggt ggcgacgtga ccggggccca ggcctatgcc tccaccgcca 360
 agtgccctgaa catctggggc ctgattctgg gcaccccat gaccattctg ctcatcgta 420
 tcccagtgt gatcttccag gcctatggat agatcaggag gcatcactga ggccaggagc 480
 tctgcccag acctgtatcc cacgtactcc aacttcatt cctgccttg cccccggagc 540
 cgagtccgt atcagccctt taccctcaca cgcttttcta caatggcatt caataaagtg 600
 cacgtgtttc tgggtgaaaa aaaaaaaaaa aaaaaactcg ag 642

<210> 120

<211> 603

<212> DNA

<213> Homo sapien

<400> 120
 gaattcggca cgagccacaa cagccactac gactgcatcc actggatcca cgccacccc 60
 gtctccacc ccgggaacag ctccccctcc caaagtgtg accagcccgg ccaccacacc 120
 catgtccacc atgtccacaa tccacacctc ctctactcca gagaccacc acacctccac 180
 agtgtgacc accacagcca ccatgacaag ggccaccaat tccacggcca caccctctc 240
 cactctgggg acgaccgga tctcactga gctgaccaca acagccacta caactgcagc 300
 cactggatcc acggccaccc tgctctccac ccagggacc acctggatcc tcacagagcc 360
 gagcactata gccaccgtga tgggtgcccac cggttccacg gccaccgct cctccactct 420
 gggaacagct cacaccccca aagtgggtgac caccatggcc actatgccc cagccactgc 480
 ctccacgggt cccagctcgt ccaccgtggg gaccaccgc acccctgcag tgctccccag 540
 cagcctgcc aacctcagcg tgtccactgt gtctctctca gtctcacca ccctgagacc 600
 cac 603

<210> 121

<211> 178

<212> PRT

<213> Homo sapien

<400> 121
 Ser Glu Pro Pro Ser Pro Ala Thr Thr Pro Cys Gly Lys Val Pro Ile
 1 5 10 15
 Cys Ile Pro Ala Arg Arg Asp Leu Val Asp Ser Pro Ala Ser Leu Ala
 20 25 30
 Ser Ser Leu Gly Ser Pro Leu Pro Arg Ala Lys Glu Leu Ile Leu Asn
 35 40 45
 Asp Leu Pro Ala Ser Thr Pro Ala Ser Lys Ser Cys Asp Ser Ser Pro
 50 55 60
 Pro Gln Asp Ala Ser Thr Pro Arg Pro Ser Ser Ala Ser His Leu Cys
 65 70 75 80
 Gln Leu Ala Ala Lys Pro Ala Pro Ser Thr Asp Ser Val Ala Leu Arg
 85 90 95
 Ser Pro Leu Thr Leu Ser Ser Pro Phe Thr Thr Ser Phe Ser Leu Gly
 100 105 110

Ser His Ser Thr Leu Asn Gly Asp Leu Ser Val Pro Ser Ser Tyr Val
 115 120 125
 Ser Leu His Leu Ser Pro Gln Val Ser Ser Ser Val Val Tyr Gly Arg
 130 135 140
 Ser Pro Val Met Ala Phe Glu Ser His Pro His Leu Arg Gly Ser Ser
 145 150 155 160
 Val Ser Ser Ser Leu Pro Ser Ile Pro Gly Gly Lys Pro Ala Tyr Ser
 165 170 175
 Phe His

<210> 122
 <211> 36
 <212> PRT
 <213> Homo sapien

<400> 122
 Met Ser Phe Leu Gly Gly Phe Phe Gly Pro Ile Cys Glu Ile Asp Val
 1 5 10 15
 Ala Leu Asn Asp Gly Glu Thr Arg Lys Met Ala Glu Met Lys Thr Glu
 20 25 30
 Asp Gly Lys Val
 35

<210> 123
 <211> 136
 <212> PRT
 <213> Homo sapien

<400> 123
 Met Ala Ser Pro Gln Leu Cys Arg Ala Leu Val Ser Ala Gln Trp Val
 1 5 10 15
 Ala Glu Ala Leu Arg Ala Pro Arg Ala Gly Gln Pro Leu Gln Leu Leu
 20 25 30
 Asp Ala Ser Trp Tyr Leu Pro Lys Leu Gly Arg Asp Ala Arg Arg Glu
 35 40 45
 Phe Glu Glu Arg His Ile Pro Gly Ala Ala Phe Phe Asp Ile Asp Gln
 50 55 60
 Cys Ser Asp Arg Thr Ser Pro Tyr Asp His Met Leu Pro Gly Ala Glu
 65 70 75 80
 His Phe Ala Glu Tyr Ala Gly Arg Leu Gly Val Gly Ala Ala Thr His
 85 90 95
 Val Val Ile Tyr Asp Ala Ser Asp Gln Gly Leu Tyr Ser Ala Pro Arg
 100 105 110
 Val Trp Trp Met Phe Arg Ala Phe Gly His His Ala Val Ser Leu Leu
 115 120 125
 Asp Gly Gly Leu Arg His Trp Leu
 130 135

<210> 124
 <211> 133
 <212> PRT
 <213> Homo sapien

<400> 124
 Met Asn His Thr Val Gln Thr Phe Phe Ser Pro Val Asn Ser Gly Gln
 1 5 10 15
 Pro Pro Asn Tyr Glu Met Leu Lys Glu Glu His Glu Val Ala Val Leu
 20 25 30
 Gly Ala Pro His Asn Pro Ala Pro Pro Thr Ser Thr Val Ile His Ile
 35 40 45
 Arg Ser Glu Thr Ser Val Pro Asp His Val Val Trp Ser Leu Phe Asn
 50 55 60
 Thr Leu Phe Met Asn Pro Cys Cys Leu Gly Phe Ile Ala Phe Ala Tyr
 65 70 75 80
 Ser Val Lys Ser Arg Asp Arg Lys Met Val Gly Asp Val Thr Gly Ala
 85 90 95
 Gln Ala Tyr Ala Ser Thr Ala Lys Cys Leu Asn Ile Trp Ala Leu Ile
 100 105 110
 Leu Gly Ile Leu Met Thr Ile Leu Leu Ile Val Ile Pro Val Leu Ile
 115 120 125
 Phe Gln Ala Tyr Gly
 130

<210> 125
 <211> 195
 <212> PRT
 <213> Homo sapien

<400> 125
 Thr Thr Ala Thr Thr Thr Ala Ser Thr Gly Ser Thr Ala Thr Pro Ser
 1 5 10 15
 Ser Thr Pro Gly Thr Ala Pro Pro Pro Lys Val Leu Thr Ser Pro Ala
 20 25 30
 Thr Thr Pro Met Ser Thr Met Ser Thr Ile His Thr Ser Ser Thr Pro
 35 40 45
 Glu Thr Thr His Thr Ser Thr Val Leu Thr Thr Thr Ala Thr Met Thr
 50 55 60
 Arg Ala Thr Asn Ser Thr Ala Thr Pro Ser Ser Thr Leu Gly Thr Thr
 65 70 75 80
 Arg Ile Leu Thr Glu Leu Thr Thr Thr Ala Thr Thr Thr Ala Ala Thr
 85 90 95
 Gly Ser Thr Ala Thr Leu Ser Ser Thr Pro Gly Thr Thr Trp Ile Leu
 100 105 110
 Thr Glu Pro Ser Thr Ile Ala Thr Val Met Val Pro Thr Gly Ser Thr
 115 120 125
 Ala Thr Ala Ser Ser Thr Leu Gly Thr Ala His Thr Pro Lys Val Val
 130 135 140
 Thr Thr Met Ala Thr Met Pro Thr Ala Thr Ala Ser Thr Val Pro Ser
 145 150 155 160
 Ser Ser Thr Val Gly Thr Thr Arg Thr Pro Ala Val Leu Pro Ser Ser
 165 170 175
 Leu Pro Thr Phe Ser Val Ser Thr Val Ser Ser Ser Val Leu Thr Thr
 180 185 190
 Leu Arg Pro
 195

<210> 126

<211> 509
 <212> DNA
 <213> Homo sapien

<400> 126
 gaattcggca cgagccaagt accccctgag gaatctgcag cctgcatctg agtacaccgt 60
 atccctcgtg gccataaagg gcaaccaaga gagccccaaa gccactggag tctttaccac 120
 actgcagcct gggagctcta ttccacctta caacaccgag gtgactgaga ccaccattgt 180
 gatcacatgg acgcctgctc caagaattgg ttttaagctg ggtgtacgac caagccaggg 240
 aggagaggca ccacgagaag tgacttcaga ctcaggaagc atcgttgtgt ccggttgac 300
 tccaggagta gaatacgtct acaccatcca agtcctgaga gatggacagg aaagagatgc 360
 gccaatgtga aacaaagtgg tgacaccatt gtctccacca acaaacttgc atctggaggg 420
 aaaccctgac actggagtgc tcacagtctc ctggagagga gcaccacccc agacattact 480
 gggatatagaa ttaccacaac ccctacaaa 509

<210> 127
 <211> 500
 <212> DNA
 <213> Homo sapien

<400> 127
 gaattcggca cgagccactg atgtccgggg agtcagccag gagcttgggg aagggaagcg 60
 cgccccggg gccgggtccc gagggtctga tccgcatcta cagcatgagg ttctgcccgt 120
 ttgctgagag gacgcgtcta gtcctgaagg ccaagggaat caggcatgaa gtcataaata 180
 tcaacctgaa aaataagcct gagtggttct ttaagaaaaa tccctttggt ctggtgccag 240
 ttctggaaaa cagtcagggt cagctgatct acgagtctgc catcacctgt gactacctgg 300
 atgaagcata ccaggggaag aagctgttgc cggatgaccc ctatgagaaa gcttgccaga 360
 agatgatctt agagtgttt tctaagggtgc catccttggt aggaagcttt attagaagcc 420
 aaaataaaga agactatgct ggccataaag aagaatttcg taaagaattt accaagctag 480
 aggaggttct gactaataag 509

<210> 128
 <211> 500
 <212> DNA
 <213> Homo sapien

<400> 128
 agcttttctc tgctgccgct cggtcacgct tgtgcccga ggaggaaaca gtgacagacc 60
 tggagactgc agttctctat ccttcacaca gctctttcac catgcctgga tcacttcctt 120
 tgaatgcaga agcttgctgg ccaaaagatg tgggaattgt tgcccttgag atctattttc 180
 cttctcaata tgttgatcaa gcagagttgg aaaaatatga tgggtgtagat gctggaaagt 240
 ataccattgg cttgggccag gccaaagatg gcttctgcac agatagagaa gatattaact 300
 ctctttgcat gactgtgggt cagaatctta tggagagaaa taacctttcc tatgattgca 360
 ttggggcggct ggaagttgga acagagacaa tcatcgacaa atcaaagtct gtgaagacta 420
 atttgatgca gctgtttgaa gagtctggga atacagatat agaaggaatc gacacaacta 480
 atgcatgcta tggaggcaca 509

<210> 129
 <211> 497
 <212> DNA
 <213> Homo sapien

<400> 129
 gaattcggca cgagcagagg tctccagagc cttctctctc ctgtgcaaaa tggcaactct 60

taaggaaaaa	ctcattgcac	cagttgcgga	agaagaggca	acagttccaa	acaataagat	120
cactgtagtg	ggtgttgac	aagttggtat	ggcgtgtgct	atcagcattc	tgggaaagtc	180
tctggctgat	gaacttgctc	ttgtggatgt	tttggaagat	aagcttaaag	gagaaatgat	240
ggatctgcag	catgggagct	tatttcttca	gacacctaaa	attgtggcag	ataaagatta	300
ttctgtgacc	gccaatctta	agattgtagt	ggtaactgca	ggagtccgtc	agcaagaagg	360
ggagagtcgg	ctcaatctgg	tgcagagaaa	tgtaaatgtc	ttcaaattca	ttattcctca	420
gatcgtcaag	tacagtcctg	attgcatcat	aattgtgggt	tccaaccag	tggacattct	480
tacgtatggt	acctgga					497

<210> 130
 <211> 383
 <212> DNA
 <213> Homo sapien

<400> 130						60
gaattcggca	cgagggccgc	ggctgccgac	tgggtcccct	gccgctgtcg	ccaccatggc	120
tccgcaccgc	cccgcgccc	cgctgctttg	cgcgctgtcc	ctggcgctgt	gcgcgctgtc	180
gctgcccgtc	cgcgcgcca	ctgcgtcgcg	ggggcgctcc	caggcggggg	cgccccaggg	240
gcggtgccc	gaggcgcggc	ccaacagcat	ggtggtgaa	caccccgagt	tcctcaaggg	300
aggggaaggag	cctggcctgc	agatctggcg	tgtggagaaa	gttcgatctg	gtggcccgtg	360
cccaccaacc	tttatggaga	cttcttcacg	ggcgacgcct	acgtcatcct	gaagacagtg	383
cagcttaaga	acggaaaatc	ttg				

<210> 131
 <211> 509
 <212> DNA
 <213> Homo sapien

<400> 131						60
gaattcggca	cgagagtcag	ccgcatcttc	ttttgcgtcg	ccagccgagc	cacatcgctc	120
agacaccatg	gggaagggtga	aggtcggagt	caacggattt	ggtcgtattg	ggcgccctgg	180
caccagggct	gcttttaact	ctggtaaagt	ggatattgtt	gccatcaatg	accccttcat	240
tgacctcaac	tacatggttt	acatgttcca	atatgattcc	acccatggca	aattccatgg	300
caccgtcaag	gctgagaacg	ggaagcttgt	catcaatgga	aatcccatca	ccatcttcca	360
ggagcgagat	ccctccaaaa	tcaagtgggg	cgatgctggc	gctgagtacg	tcgtggagtc	420
cactggccgt	cttcaccacc	atggagaagg	ctggggctca	tttgaggggg	ggagccaaaa	480
gggtcatcat	ctctgcccc	tctgctgacg	cccccatgtt	cgatcatggg	gtgaaccatg	509
agaagtatga	caacagcctc	aagatcatc				

<210> 132
 <211> 357
 <212> DNA
 <213> Homo sapien

<400> 132						60
gaattcggca	cgagtaagaa	gaagccccta	gaccacagct	ccacaccatg	gactggacct	120
ggaggatcct	cttcttggtg	gcagcagcaa	caggtgccca	ctcccagggtg	caactggtgc	180
aatctgggtc	tgagttgaag	aagcctgggg	cctcagtga	ggtttctctg	aaggcttctg	240
gacacatctt	cagtatctat	ggtttgaatt	gggtgcgaca	ggccctggt	caaggccttg	300
agtggatggg	atggatcaaa	gtcgacactg	cgaacccaac	gtatgccag	ggcttcacag	357
gacgatttgt	cttctccctg	gacacctctg	tcagcacggc	atatctgcag	atcagca	

<210> 133
 <211> 468

<212> DNA

<213> Homo sapien

<400> 133						60
gaattcggca	cgagggcgccc	cgaaccgtcc	tctgtgtgct	ctcggcgggc	ctggccctga	120
ccgagacctg	ggccgggtcc	cactccatga	ggtatttcga	caccgcatg	tcccggccc	180
gccgcgggga	gccccgcttc	atctcagtgg	gctacgtgga	cgacacgcag	ttcgtgaggt	240
tcgacagcga	cgccgcgagt	ccgagagagg	agccgcgggc	gccgtggata	gagcaggagg	300
ggccggagta	ttgggaccgg	aacacacaga	tcttcaagac	caacacacag	actgaccgag	360
agagcctgcg	gaacctgcgc	ggctactaca	accagagcga	ggccgggtct	cacaccctcc	420
agagcatgta	cggctgcgac	gtggggccgg	acgggcgcct	cctccgcggg	cataaccagt	468
acgcctacga	cggcaaggat	tacatcgccc	tgaacgagga	cctgcgct		

<210> 134

<211> 214

<212> DNA

<213> Homo sapien

<400> 134						60
gaattcggca	cgagctgcgt	cctgtgtgagc	tctgttctct	ccagcacctc	ccaaccact	120
agtgcctggt	tctctgtctc	caccaggaac	aagccaccat	gtctcgccag	tcaagtgtgt	180
ccttcgggag	cgggggcagt	cgtagcttca	gcaccgcctc	tgccatcacc	ccgtctgtct	214
cccgcaccag	cttcacctcc	gtgtcccgtt	ccgg			

<210> 135

<211> 355

<212> DNA

<213> Homo sapien

<400> 135						60
gaattcggca	cgaggtgaac	aggaccgctc	gccatggggc	gtgtgatccg	tggaacagagg	120
aagggcgccg	ggtctgtgtt	ccgcgcgcac	gtgaagcacc	gtaaaggcgc	tgcgcgccctg	180
cgcgcctggt	atttcgtgta	gcggcacggc	tacatcaagg	gcacgtcaa	ggacatcatc	240
cacgaccggg	gccgcggcgc	gcccctcgcc	aaggtggtct	tccgggatcc	gtatcggttt	300
aagaagcgga	cggagctggt	cattgcccgc	gagggcattc	acacgggcca	gtttgtgtat	355
tgccgcaaga	aggcccagct	caacattggc	aatgtgtctc	ctgtgggcac	catgc	

<210> 136

<211> 242

<212> DNA

<213> Homo sapien

<400> 136						60
gaattcggca	cgagccagct	cctaaccggc	agtgatccgc	cagcctccgc	ctcccagaggt	120
gcccggattg	cagacggagt	ctccttcact	cagtgtctca	tggtgcccag	gctggagtgc	180
agtgggtgta	tctcggtctg	ctacaacatc	cacctcccag	cagcctgcct	tgccctcca	240
aagtgccgag	attgcagctc	tctgcccggc	cgccaccctt	gtctgggaag	tgaggatgct	242
gt						

<210> 137

<211> 424

<212> DNA

<213> Homo sapien

<400> 137
 gaattcggca cgagcccaga tcccagaggtc cgacagcgcc cggcccagat ccccacgcct 60
 gccaggagca agccgagagc cagccggccg gcgcactccg actccgagca gtctctgtcc 120
 ttcgaccga gcccgcgcgc ctttcggga cccctgcccc gcgggcagcg ctgccaacct 180
 gccggccatg gagaccccg tcccagcgcg cgccaccgc agcggggcgc aggccagctc 240
 cactccgtg tgcgccacc gcacacccg gctgcaggag aaggaggacc tgcaggagct 300
 caatgatcg ttggcggtct acatcgaccg tgtgcgctcg ctggaaacgg agaacgcagg 360
 gctgcgcctt cgcacacccg agtctgaaga ggtggtcagc cgcgaggtgt ccggcatcaa 420
 ggcc 424

<210> 138
 <211> 448
 <212> DNA
 <213> Homo sapien

<400> 138
 gaattcggca cgagcctgtg ttccaggagc cgaatcagaa atgtcatcct caggcacgcc 60
 agacttacct gtccactca ccgatttgaa gattcaatat actaagatct tcataaacia 120
 tgaatggcat gattcagtga gtggcaagaa atttcctgtc tttaatcctg caactgagga 180
 ggagctctgc caggtagaag aaggagataa ggaggatgtt gacaaggcag tgaaggccgc 240
 aagacaggct tttcagattg gatccccgtg gcgtactatg gatgcttccg agagggggcg 300
 actattatac aagttggctg atttaatcga aagagatcgt ctgctgctgg ccgacaatgg 360
 agtcaatgaa tgggtgaaaa ctctattcca atgcatactt gaatgattta gcaggctgca 420
 tcaaaacatt gcgctactgt gcaggttg 448

<210> 139
 <211> 510
 <212> DNA
 <213> Homo sapien

<400> 139
 gaattcggca cgaggttccg tgcagctcac ggagaagcga atggacaaag tcggcaagta 60
 ccccaaggag ctgcgcaagt gctgcgagga cggcatgcgg gagaacccca tgaggttctc 120
 gtgccagcgc cggaccggtt tcctctccct ggcgaggcgt gcaagaaggc cttcctggac 180
 tgcgtcaact acatcacaga gctgcggcgg cagcacgcgc gggccagcca cctggcctgc 240
 caggagtaac ctggatgagg acatcattgc agaagagaac atcgtttccc gaagtgaatt 300
 cccagagagc tggctgtgga acgttgagga cttgaaagag ccaccgaaaa atggaatctc 360
 tacgaagctc atgaatatat ttttgaaaga ctccatcacc acgtgggaga ttctggctgt 420
 gagcatgtcg gacaagaaag ggatctgtgt ggcagacccc ttcgaggtca cagtaatgca 480
 ggactttctt atcgacctgc ggctacccta 510

<210> 140
 <211> 360
 <212> DNA
 <213> Homo sapien

<400> 140
 gaattcggca cgagcggtaa ctaccccgcc tgcgcacagc tcggcgctcc ttcccgtccc 60
 ctacacacacc ggcctcagcc cgcaccggca gtagaagatg gtgaaagaaa caacttacta 120
 cgatgttttg ggggtcaaac ccaatgctac tcaggaagaa ttgaaaaagg cttataggaa 180
 actggctttg aagtaccatc ctgataagaa cccaaatgaa ggagagaagt ttaaacagat 240
 ttctcaagct tacgaagttc tctctgatgc aaagaaaagg gaattatatg acaaaggagg 300
 agaacaggca attaaagagg gtggagcagg tggcggtttt ggctcccca tggacatctt 360

<400> 141

<210> 142

$\langle 211 \rangle$ 500

<212> DNA

<213> Homo sapien

<400> 142

<210> 143

 $\langle 211 \rangle$ 400

<212> DNA

<213> Homo sapien

<400> 143

<210> 144

$\langle 211 \rangle$ 243

<212> DNA

<213> Homo sapien

<400> 144

<400> 144
gaattcggca cgagccagct cctaaccgcg agtgatccgc cagcctccgc ctcccagagt 60
gcccgattg cagacggagt ctccttcact cagtgtcaa tgggtgccag gctggagtgc 120

agtggtgtga tctcggtctg ctacaacatc cacctcccag cagcctgcct tggcctccca 180
 aagtgccgag attgcagcct ctgcccgcc gtcaccccg ctgggaagtg aggagcgttt 240
 ctg 243

<210> 145
 <211> 450
 <212> DNA
 <213> Homo sapien

<400> 145
 gaattcggca cgaggacagc aggaccgtgg aggccgcggc aggggtggca gtggtggcgg 60
 cggcgccggc ggcggtggtg gttacaaccg cagcagtggg ggctatgaac ccagaggtcg 120
 tggaggtggc cgtggaggca gaggtggcat gggcggaagt gaccgtggtg gcttcaataa 180
 atttgggtggc cctcgggacc aaggatcacg tcatgactcc gaacaggata attcagacaa 240
 caacaccatc tttgtgcaag gcctgggtga gaatgttaca attgagtctg tggctgatta 300
 cttcaagcag attggtatta ttaagacaaa caagaaaacg ggacagccca tgattaattt 360
 gtacacagac agggaaactg gcaagctgaa gggagaggca acggtctctt ttgatgacct 420
 accttcagct aaagcagcct attgactggg 450

<210> 146
 <211> 451
 <212> DNA
 <213> Homo sapien

<400> 146
 gaattcggca cgagccatcg agtccctgcc tttcgacttg cagagaaatg tctcgctgat 60
 gcgggagatc gacgcgaaat accaagagat cctgaaggag ctagacgagt gctacgagcg 120
 cttcagtcgc gagacagacg gggcgagaa ggcggcgatg ctgcactgtg tgcagcgcg 180
 gctgatccgc accaggagct gggcgacgag aagatccaga tcgtgagcca gatggtggag 240
 ctggtggaga accgcacgcg gcaggtggac agccacgtgg agctgttcga ggcgagcag 300
 gagctgggag acacagcggg caacagcggc aaggctggcg cggacaggcc caaaggcgag 360
 gcggcagcgc aggtgacaa gcccaacagc aagcgctcac ggcggcagcg caacaacgag 420
 aaccgtgaga acgctccag caaccacgac c 451

<210> 147
 <211> 400
 <212> DNA
 <213> Homo sapien

<400> 147
 gaattcggca cgagctcgga tgtcagcagg cgtcccaacc cagcaggaac tggctcaatt 60
 ctcagaagaa agcgatcggc cccgaggcag gaaggccggc tccggtgcag ggcgcgccgc 120
 ctgcgggctg cttcgggcca ggtcgaccc gagggccagc gcaagcagcg gcaacaggag 180
 cgccaggagg acatgaggct ctgcctgcag tcagcaactt ggaatattca gacttcagac 240
 cagcatcaca gattataacc ctccgtaaat catctgcac ccagctccca tcaaaagcca 300
 gcctgaagga ccatggaca cgtgactcca gtgttctcaa caacatctta gatcaagttg 360
 gtttgacaaa catttgcatc tacttgggac aaagcaagaa 400

<210> 148
 <211> 503
 <212> DNA
 <213> Homo sapien

<400> 148

aaaagaattc	ggcacgagcg	ggcgcgctca	tccccctctc	ccagcagatt	cccactggaa	60
attcgttgta	tgaatcttat	tacaagcagg	tcgatccggc	atacacaggg	aggggtggggg	120
cgagtgaagc	tgcgcttttt	ctaaagaagt	ctggcctctc	ggacattatc	cttgggaaga	180
tatgggactt	ggccgatcca	gaaggtaaaag	ggttcttgga	caaacagggg	ttctatgttg	240
cactgagact	ggtggcctgt	gcacagagtg	gccatgaagt	taccttgagc	aatctgaatt	300
tgagcatgcc	accgcctaaa	tttcacgaca	ccagcagccc	tctgatggtc	acaccgccct	360
ctgcagaggc	ccactgggct	gtgaggggtg	aagaaaaggc	caaatttgat	gggatttttg	420
aaagcctctt	gcccataaat	ggtttgctct	ctggagacaa	agtcaagcca	gtcctcatga	480
actcaaagct	gcctcttgat	gtc				503

<210> 149
 <211> 1061
 <212> DNA
 <213> Homo sapien

<400> 149					60	
gaattcggca	cgaggccttt	tccagcaacc	ccaaggtcca	ggtggaggcc	atcgaagggg	120
gagccctgca	gaagctgctg	gtcatcctgg	ccacggagca	gccgctcact	gcaaagaaga	180
aggctcctgtt	tgcactgtgc	tccctgctgc	gccacttccc	ctatgccag	cggcagttcc	240
tgaagctcgg	ggggctgcag	gtcctgagga	ccctgggtca	ggagaagggc	acggaggtgc	300
tcgccgtgcg	cgtgggtcaca	ctgctctacg	acctgggtcac	ggagaagatg	ttcgccgagg	360
aggaggctga	gctgacccag	gagatgtccc	cagagaagct	gcagcagtat	cgccaggtac	420
acctcctgcc	aggcctgtgg	gaacagggct	ggtgcgagat	cacggcccac	ctcctggcgc	480
tgcccgagca	tgatgcccgt	gagaaggtgc	tgacagacact	gggcgtcctc	ctgaccacct	540
gccgggaccg	ctaccgtcag	gacccccagc	tcggcaggac	actggccagc	ctgcaggctg	600
agtaccaggt	gctggccagc	ctggagctgc	aggatggtga	ggacgagggc	tacttccagg	660
agctgctggg	ctctgtcaac	agcttgctga	aggagctgag	atgaggcccc	acaccagtac	720
tggactggga	tgccgctagt	gaggctgagg	ggtgccagcg	tgggtgggct	tctcaggcag	780
gaggacatct	tggcagtgt	ggcttgccca	ttaaatggaa	acctgaaggc	catcctcttt	840
ctgctgtgtg	tctgtgtaga	ctgggcacag	ccctgtggcc	gggggggtcag	gtgagtgggt	900
gggtgatggg	ctctgctgac	gtgcagggct	cagcccaggg	catccaggaa	caggctccag	960
ggcaggaacc	tgggccagg	agttgcaagt	ctctgcttct	taccaagcag	cagctctgta	1020
ccttggaag	tcgcttaatt	gctctgagct	tgtttctca	tctgtcagga	gtgccattaa	1061
aggagaaaa	tcacgtaaaa	aaaaaaaaa	aaaaactcga	g		

<210> 150
 <211> 781
 <212> DNA
 <213> Homo sapien

<400> 150					60	
gaattcggca	cgagaaatgg	cggcaggggt	cgaagcggca	gccgaagtgg	cggcgacaga	120
acccaaaaatg	gaggaagaga	gcggcgcgcc	ctgcgtgccg	agcggcaacg	gagctccggg	180
cccgaagggg	gaagaacgac	ctactcagaa	tgagaagagg	aaggagaaaa	acataaaaag	240
aggaggcaat	cgctttgagc	catattccaa	cccaactaaa	agatacagag	ccttcattac	300
aaatatacct	tttgatgtga	aatggcagtc	acttaaagac	ctggttaaag	aaaaagttgg	360
tgaggtaaca	tacgtggagc	tcttaatgga	cgctgaagga	aagtcaaggg	gatgtgctgt	420
tgttgaattc	aagatggagg	agagcatgaa	aaaagctgct	gaagttctaa	acaagcatag	480
tctgagtggg	aggccactga	aagtcaagga	agatcctgat	ggtgaacatg	caaggagagc	540
aatgcaaaaag	gctggaagac	ttggaagcac	agtatttgta	gcaaatctgg	attataaagt	600
tggctggaag	aaactgaagg	aagtatttag	tatggctggg	gtgggtggcc	gagcagacat	660
tctggaagat	aaagatggga	aaagtcgtgg	aataggcatt	gtgacttttg	aacagtcctat	720
tgaagctgtg	caagcaatat	ctatgtttaa	tggccagttg	ctgtttgata	gaccgatgca	780
cgtcaagatg	gatgagaggg	ctttacccaa	gggagacttt	tttctcctg	aacgccacag	

c

<210> 151
 <211> 3275
 <212> DNA
 <213> Homo sapien

<400> 151

cttaagtgga	tcttgcac	ggagggagca	gacaccggag	aaagaaaaac	aagttgtgct	60
gtttgaggaa	gcaagttgga	cctgcactcc	agcctgtgga	gatgaaccta	ggactgtgat	120
tctgctatcc	agtatgttgg	ctgaccacag	gctcaaactg	gaggattata	aggatcgctt	180
gaaaagtgga	gagcatctta	atccagacca	gttggaaagct	gtagagaaat	atgaagaagt	240
gctacataat	ttggaatttg	ccaaggagct	tcaaaaaacc	ttttctgggt	tgagcctaga	300
tctactaaaa	gcgcaaaaga	aggcccagag	aagggagcac	atgctaaaac	ttgaggctga	360
gaagaaaaag	cttcgaacta	tacttcaagt	tcagtatgta	ttgcagaact	tgacacagga	420
gcacgtacaa	aaagacttca	aaggggggtt	gaatgggtgca	gtgtatttgc	cttcaaaaaga	480
acttgactac	ctcattaagt	tttcaaaact	gacctgccct	gaaagaaatg	aaagtctgag	540
acaaacactt	gaaggatcta	ctgtctaaat	tgtctgaactc	aggctatttt	gaaagtatcc	600
cagttcccaa	aaatgccaa	gaaaaggaag	taccactgga	ggaagaaatg	ctaatacaat	660
cagagaaaaa	aacacaatta	tcgaagactg	aatctgtcaa	agagtccagag	tctctaattg	720
aatttgccca	gccagagata	caaccacaag	agtttcttaa	cagacgctat	atgacagaag	780
tagattattc	aaacaaacaa	ggcgaagagc	aaccttggga	agcagattat	gctagaaaac	840
caaactctcc	aaaacgttgg	gatatgctta	ctgaaccaga	tggtcaagag	aagaaacagg	900
agtcctttta	gtcctgggag	gcttctggta	agcaccagga	ggtatccaag	cctgcagttt	960
ccttagaaca	gaggaaacaa	gacacctcaa	aactcagggtc	tactctgccg	gaagagcaga	1020
agaagcagga	gatctccaaa	tccaagccat	ctcctagcca	gtggaagcaa	gatacaccta	1080
aatccaaagc	agggtatggt	caagaggaac	aaaagaaaca	ggagacacca	aagctgtggc	1140
cagttcagct	gcagaaagaa	caagatccaa	agaagcaaac	tccaaagtct	tggaacacct	1200
ccatgcagag	cgaacagaac	accaccaagt	catggaccac	tcccatgtgt	gaagaacagg	1260
attcaaaaac	gccagagact	ccaaaatcct	gggaaaacaa	tgttgagagt	caaaaacact	1320
ctttaacatc	acagtcacag	atttctccaa	agtcctgggg	agtagctaca	gcaagcctca	1380
taccaaatga	ccagctgctg	cccaggaagt	tgaacacaga	acccaaagat	gtgcctaagc	1440
ctgtgcatca	gcctgtaggt	tcttctctta	cccttccgaa	ggatccagta	ttgaggaaag	1500
aaaaactgca	ggatctgatg	actcagattc	aaggaacttg	taactttatg	caagagtctg	1560
ttcttgactt	tgacaaacct	tcaagtgcac	ttccaacgtc	acaaccgcct	tcagctactc	1620
caggtagccc	cgtagcatct	aaagaacaaa	atctgtccag	tcaaaagtgt	tttcttcaag	1680
agccgttaca	ggtattttaac	gttaatgcac	ctctgcctcc	acgaaaagaa	caagaaataa	1740
aagaatcccc	ttattcacct	ggctacaatc	aaagttttac	cacagcaagt	acacaaacac	1800
cacccagtg	ccaactgcc	tctatacatg	tagaacaac	tgtccattct	caagagactg	1860
cagcaaatta	tcatcctgat	ggaactattc	aagtaagcaa	tggtagcctt	gccttttacc	1920
cagcacagac	gaatgtgttt	cccagacctc	ctcagccatt	tgtcaatagc	cggggatctg	1980
ttagaggatg	tactcgtggt	gggagattaa	taaccaattc	ctatcgtgcc	cctggtgggt	2040
ataaagggtt	tgatacttat	agaggactcc	cttcaatttc	caatggaaat	tatagccagc	2100
tgcagttcca	agctagagag	tattctggag	caccttattc	ccaaagggat	aatttccagc	2160
agtgttataa	gcgaggagg	acatctggtg	gtccacgagc	aaattcgaga	gcagggtgga	2220
gtgattcttc	tcaggtgagc	agccagaaa	gagacaacga	aacctttaac	agtgggtgact	2280
ctggacaagg	agactcccgt	agcatgaccc	ctgtggatgt	gccagtgaca	aatccagcag	2340
ccaccatact	gccagtacac	gtctaccctc	tgccctcagca	gatgcgagtt	gccttctcag	2400
cagccagaac	ctctaactctg	gcccttgga	cttttagacca	acctattgtg	tttgatcttc	2460
ttctgaacaa	cttaggagaa	acttttgatc	ttcagcttgg	tagatttaac	tgccagtgta	2520
atggcactta	cgttttcatt	tttcacatgc	ttaagctggc	agtgaatgtg	ccactgtatg	2580
tcaacctcat	gaagaatgaa	gaggtcttgg	tatcagccta	tgccaatgat	ggtgctccag	2640
accatgaaac	tgctagcaat	catgcaattc	ttcagctctt	ccagggagac	cagatatggt	2700
tacgtctgca	caggggagca	atztatggaa	gtagctggaa	atattctacg	ttttcaggct	2760

atcttcttta tcaagattga aagtcagtag agtattgaca ataaaaggat ggtgttctaa 2820
 ttagtgggat tgaaggaaaa gtagtctttg cctcatgac tgattggtt aggaaaatgt 2880
 ttttgttcct agagggagga ggtccttact tttttgttt ccttcctgag gtgaaaaatc 2940
 aagctgaatg acaattagca ctaatctggc actttataaa ttgtgatgta gcctcgctag 3000
 tcaagctgtg aatgtatatt gtttgcaatt aatccttaac tgtattaacg ttcagcttac 3060
 taaactgact gcctcaagtc caggcaagtt acaatgcctt gttgtgcctc aataaaaaag 3120
 ttacatgcaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 3180
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 3240
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa tgcag 3275

<210> 152

<211> 2179

<212> DNA

<213> Homo sapien

<400> 152

gaattcggca ccaggcacta ttaaatgtga ggcagcctcc atctactaca acatttgtgc 60
 tgaatcaaata aatcatctt ccacccttgg gatctacaat tgtaatgact aaaacaccac 120
 ctgtaacaac caacaggcaa accatcactt taactaagtt tatccagact actgcaagca 180
 cacgcccgtc agtctcagca ccaacagtag gaaatgccat gacctctgca ccttcaaaaag 240
 accaagttca gcttaaagat ctactgaaaa ataatagtct taatgaactg atgaaactaa 300
 agccacctgc taatattgct cagccagtag caacagcagc tactgatgta agcaatggta 360
 cagtaaagaa agagtcttct aataaagaag gagctagaat gtggataaac gacatgaaga 420
 tgaggagttt ttccccaacc atgaagggtc ctggtgtaaa agaagatgat gaaccagagg 480
 aagaagatga agaagaaatg ggtcatgcag aaacctatgc agaatacatg ccaataaaat 540
 taaaaattgg cctacgtcat ccagatgctg tagtggaac cagctcttta tccagtgtta 600
 ctctctctga tgtttggtac aaaacatcca tttctgagga aaccattgat aatggctggg 660
 tatcagcatt gcagcttgag gcaattacat atgcagccca gcaacatgaa actttcctac 720
 ctaatggaga tcgtgctggc ttcttaatat gtgatgggtc cgggtgtagga aaaggaagga 780
 cgatagcagg aatcatctat gaaaattatt tggtgagtag aaaacgagca ttgtggttta 840
 gtgtttcaaa tgacttaaa tatgatgctg aaagagattt aagggatatt ggagcaaaaa 900
 acattttggt tcattcgtaa aataagttta aatacgaaa aatttcttcc aaacataatg 960
 ggagtgtgaa aaagggtgtt atttttgcta cttactcttc acttattggg gaaagccagt 1020
 ctggcggcaa gtataaaact aggttaaaac aacttctgca ttggtgcggt gatgacttcg 1080
 atggagtgat agtgtttgat gagtgtcata aagcaaaaaa cttatgtcct gttgggttctt 1140
 caaagccaac caagacaggc ttagcagttt tagagcttca gaacaaattg ccaaaagcca 1200
 gagttgttta tgctagtgca actggtgctt ctgaaccacg caacatggcc tatatgaacc 1260
 gtcttgcat atgggtgag ggtactccat ttagagaatt cagtgtttt attcaagcag 1320
 tagaacggag aggagttggg gccatggaaa tagttgctat ggatatgaag cttagaggaa 1380
 tgtacattgc tcgacaactg agctttactg gagtgacctt caaaattgag gaagttcttc 1440
 tttctcagag ctacgttaaa atgtataaca aagctgtcaa gctgtgggtc attgccagag 1500
 agcgggtttca gcaagctgca gatctgattg atgctgagca acgaatgaag aagtcctatg 1560
 ggggtcagtt ctggtctgct caccagaggt tcttcaaata cttatgcata gcatccaaaag 1620
 ttaaaagggt tgtgcaacta gctcgagagg aaatcaagaa tggaaaatgt gttgtaattg 1680
 gtctgcagtc tacaggagaa gctagaacat tagaagcttt ggaagagggc gggggagaat 1740
 tgaatgattt tgtttcaact gccaaagggt tgttgcaagc actcattgaa aaacattttc 1800
 ctgctccaga caggaaaaaa ctttataagt tactaggaat cgatttgaca gctccaagta 1860
 acaacagttc gccaaagat agtccttgta aagaaaataa aataaagaag cggaaagggtg 1920
 aagaaaatac tcgagaagcc aaaaaagcac gaaaagtagg tggccttact ggtagcagtt 1980
 ctgacgacag tggaagtga tctgatgcct ctgataatga agaaagtac tatgagagct 2040
 ctaaaaacat gagttctgga gatgatgacg atttcaacc attttttagat gagtctaag 2100
 aggatgatga aatgatccc tggttaatta aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2160
 aaaaaaaaaa aaactcgag

<210> 153
 <211> 2109
 <212> DNA
 <213> Homo sapien

<400> 153
 cagagagccc caggcatcga ggagaaggcg gcggagaatg gggccctggg gtcccccgag 60
 agagaagaga aagtgctgga gaatggggag ctgacacccc caaggaggga ggagaaagcg 120
 ctggagaatg gggagctgag gtccccagag gccggggaga aggtgctggt gaatgggggc 180
 ctgacacccc caaagagcga ggacaagggtg tcagagaatg ggggcctgag attccccagg 240
 aacacggaga ggccaccaga gactgggcct tggagagccc cagggccctg ggagaagacg 300
 cccgagagtt ggggtccagc cccacgacgc ggggagccag cccagagac ctctctggag 360
 agagcccctg caccagcgc agtgggtctcc tcccgaacg gcggggagac agcccctggc 420
 ccccttggcc cagcccccaa gaacgggacg ctggaacccg ggaccgagag gagagcccc 480
 gagactgggg gggcgccgag agccccaggg gctgggagggc tggacctcgg gagtgggggc 540
 cgagcccagc tgggcacggg gacggcccc ggccggcgcc ccggaagcgg cgtggacgca 600
 aaggccgatg gggtagacaa cacgaggccg cagccaccgc cgccaccgct gccaccgcca 660
 ccgaggggag agcccggggc cccagacagc agggccggcg gagacacggc actcagcgga 720
 gacggggacc cccccaagcc cgagaggaag ggccccgaga tgccacgact attcttggac 780
 ttgggacccc ctcaagggaa cagcgagcag atcaaagcca ggctctccc gctctcgctg 840
 gcgctgccgc cgctcacgct cagccattc cccggggccg gcccgcgcg gccccgtgg 900
 gagggcgcgc acgcccgggc ggctggcggg gagggccggg gggcgggagc gccggggccg 960
 gcggagggag acggggagga cgaggacgag gacgaggagg aggacgagga ggcggggcg 1020
 ccgggcgcgg cggcggggcc gcggggcccc gggagggcgc aggacgagga ggcggggcg 1080
 gtggtgagca gcgcccagc ggacgcggcc cgcccgtgc gggggctgct caagtctccg 1140
 cgcggggccc acgagccaga ggacagcgag ctggagagga agcgcaagat ggtctccttc 1200
 cacggggagc tgacctcta cctcttcgac caggagacgc caaccaacga gctgagcgtc 1260
 cagggcccc ccgaggggga cagggacccg tcaacgcctc cagcgcccc gacacctccc 1320
 caccgcccga ccccgaggga tgggtttccc agcaacgaca gcggttttg aggcagtttc 1380
 gagtgggcgg aggatttccc cctcctcccc cctccaggcc ccccgctgtg cttctcccgc 1440
 ttctccgtct cgctgcgct ggagacccc gggccacccc ccccggtgca cctcagaag 1500
 cccgcaggcc ccgtggagaa ttgattcccc gaagaccgca ccccgctgca cctcagaag 1560
 aggggttaga aatggaatcc tctgtggatg acggcgccac tgccaccacc gcagacgccg 1620
 cctctgggga ggcccccgag gctgggcctt cccctcccca ctcccctacc atgtgccaaa 1680
 cgggaggccc cgggcccccg cccccccagc ccccgccctc catagagagc cgcctttctc 1740
 cccctcgag ccaaagaggg caggaatccc cccgcccctc acagcgaggg tcctcctca 1800
 ggaactgaac tgaactctt tgggcctgga gccctcgac cccggacccc ccatttcgag 1860
 cccactcctg gcccaagaca ggggcgcgag gcttcgggga cccggacccc ccatttcgag 1920
 tctcccctt cctccccag cccggcccc ggaggggcct ctggttcaaa ccttcgctg 1980
 gcattttcac attattttaa aaagacaaaa acaactttt ggaggaaaaa aaaaaaaaaa 2040
 aaactcgag 2100

<210> 154
 <211> 1411
 <212> DNA
 <213> Homo sapien

<400> 154
 gaattcggca ccaggggaga tgaggaagtt cgatgttctt agcatggagt ctacccttaa 60
 ccagccagcc atgctagaga cgttatactc agatccacat taccgagccc atttcccaa 120
 cccaagacct gatacaaata aggatgtata caaagtattg ccagaatcca agaaggcacc 180
 gggcagtggt gcagtatttg agaggaacgg accacatgct agcagtagtg ggtgctccc 240
 tttgggactc cagcctgagc ctggactttc caagtacta tcctctcagg tgtggcaacc 300

aagtcctgac ccttggcatc ctggagaaca atcctgtgaa ctcaagtactt gtcgacagca 360
 gttggaattg atccgtttac agatggagca aatgcagctt cagaacggag ccatgtgtca 420
 ccatcctgct gctttcgtc cattactgcc caccctagag ccagcacagt ggctcagcat 480
 cctgaacagt aacgagcatc tcctgaagga gaaggagctc ctcatgaca agcaaaggaa 540
 gcatactctc cagctggagc agaaagtgc agagagtga ctgcaagtcc acagtgccct 600
 tttgggccgc cctgccccct ttggggatgt ctgcttattg aggctacagg agttgcagcg 660
 agagaacact ttcttacggg cacagtttgc acagaagaca gaagccctga gcaaggagaa 720
 gatggagctt gaaaagaaac tctctgcatc tgaagttgaa attcagctca ttagggagtc 780
 tctaaaagtg acactacaga agcattcggg ggaggggaag aaacaggagg aaagggtcaa 840
 aggtcgtgat aaacatatca ataatttgaa aaagaaatgt cagaaggaat cagagcagaa 900
 ccgggagaag cagcagcgta ttgaaacctt ggagcgctat ctactgacc tgcccacct 960
 agaagaccat cagaaacaga cggagcagct taaggacgct gaattaaaga acacagaact 1020
 gcaagagaga gtggtgagc ttgagacttt gctggaggac acccaggcaa cctgcagaga 1080
 gaaggaggtt cagctggaaa gtctgagaca aagagaagca gacctctcct ctgctagaca 1140
 taggtaatgc cctgtgtact tgggggaagg agggagtgc gttctggtgc tctgttaact 1200
 cttgtgtgtt caacagtgtt catttcaagt tcctttcttc taagagcttt gtgttctttg 1260
 aattgaaagt cacttatggc cgggtgtggt ggcgcacacc tttaatccca gcacttggga 1320
 gtcagaggca ggctaatttc tgagtttcag gacagccagg gctatacaga gaaacctgt 1380
 ctcaaacaaa aaaaaaaaaa aaaaactcga g 1411

<210> 155
 <211> 678
 <212> DNA
 <213> Homo sapien

<400> 155
 ctggagtga gggagctagt ggtaaaggga gctggtggag ggggtggcggc aggggtaagg 60
 ggcaggggac accctctaga cggagagcgg gctccgaggt cctggctggc cctcgggtgcg 120
 cccgccccctg tgttgggtccc acaatccctg gcaatgagag gccagggttt attggacaga 180
 gtcagttgtg ggggttcagag ggtcagcaat caatcaatcc tccgaatcca gagatttaga 240
 cccagtcgtc cgtattagga ctggaggggg gtcaataggt tcagtgtttg agatgccaag 300
 ggaacctgtc ttttgatttg gggttcaaca tacagagttc aggtacctgc aggaatttgc 360
 ccccttaggc acaggggggtg gtctttacca ttttcgagac cagatccctg ctgggagccc 420
 cgaggcattc ttcgtgctca atgctgatgt ctgctccgac ttccccctga gtgctatgtt 480
 ggaagccac cgacgccagc gtcaccttt cttactcctt ggactacgg ctaacaggac 540
 gcaatccctc aactacggct gcatcggtga gaatccacag acacacgagg tattgacta 600
 tgtggagaaa cccagcacat ttatcagtga catcatcaac tgcggcacct acctcttttc 660
 tctgaagcc ttgaagcc 678

<210> 156
 <211> 2668
 <212> DNA
 <213> Homo sapien

<400> 156
 gggaaggcgg ctgcgtgct gggcgggggc gggagctgga gccggagctg gagccggggc 60
 cggggcccg gtcagcgtt gagccgggag aagagtttga gatcgtggac cgaagccagc 120
 tgcccggccc aggcagactg cggagcgcaa cgaggccgag ggccggcgag ggctggtcgg 180
 cgcccatcct gacctggca cgcagggcc cgggaaacct gtcggcgagc tgcgggagcg 240
 cgctgcgcgc ggccgcggg ctggcgggc gggacagcgg ggacggcacg gcgcgcgcag 300
 cttctaagt ccagatgat gaggagcgtg ccaacctgat gcacatgat aaactcagca 360
 tcaaggtgtt gctccagtc gctctgagcc tgggcccag cctggatgcg gaccatgcc 420
 ccttgacga gttctttgta gtgatggagc actgcctcaa acatgggctg aaagttaaga 480
 agagttttat tggccaaaat aaatcattct ttggtcctt ggagctggtg gagaaacttt 540

gtccagaagc atcagatata gcgactagt tccagaatct tccagaatta aagacagctg 600
 tgggaagagg ccgagcgtgg ctttatcttg cactcatgca aaagaaactg gcagattatc 660
 tgaaagtgct tatagacaat aaacatctct taagcgagtt ctatgagcct gaggctttaa 720
 tgatggagga agaagggatg gtgattgttg gtctgctggt gggactcaat gttctcgtg 780
 ccaatctctg cttgaaagga gaagacttgg attctcaggt tggagtaata gatttttccc 840
 tctaccttaa ggatgtgcag gatcttgatg gtggcaagga gcatgaaaga attactgatg 900
 tccttgatca aaaaaattat gtggaagaac ttaaccggca cttgagctgc acagttgggg 960
 atcttcaaac caagatagat ggcttgaaa agactaactc aaagcttcaa gaagagcttt 1020
 cagctgcaac agaccgaatt tgctcacttc aagaagaaca gcagcagtta agagaacaaa 1080
 atgaattaat tcgagaaaga agtgaaaaga gtgtagagat acaaaaacag gataccaaag 1140
 ttgagctgga gacttacaa caaactcggc aaggtctgga tgaaatgtac agtgatgtgt 1200
 ggaagcagct aaaagaggag aagaaagtcc ggttggaact ggaaaaagaa ctggagttac 1260
 aaattggaat gaaaaccgaa atggaaattg caatgaagtt actggaaaag gacaccacg 1320
 agaagcagga cacactagt gccctccgcc agcagctgga agaagtcaaa gcgattaatt 1380
 tacagatggt tcacaaagct cagaatgcag agagcagttt gcagcagaag aatgaagcca 1440
 tcacatcctt tgaaggaaaa accaaccaag ttatgtccag catgaaacaa atggaagaaa 1500
 gggtgcagca ctccggagcgg gcgagcgagg gggctgagga gcggagccac aagctgcagc 1560
 aggagctggg cgggaggatc ggccgcctgc agctgcagct ctcccagctg cagcagcaat 1620
 gctcaagcct ggagaaagaa ttgaaatcag aaaaagagca aagacaggct cttcagcgcg 1680
 aattacagca cgagaaagac acttcctctc tactcaggat ggagctgcaa caagtggag 1740
 gactgaaaaa ggagttgcgg gagcttcagg acgagaaggc agagctgcag aagatctgcg 1800
 aggagcagga acaagccctc caggaaatgg gcctgcacct cagccagtc aagctgaaga 1860
 tggaagatat aaaagaagtg aaccaggcac tgaagggcc aagctgacg 1920
 aagcgacaca ctgtaggcag tgtgagaagg agttctccat ttcccggaga aagcaccact 1980
 gccggaactg tggccacatc ttctgcaaca cctgctccag caacgagctg gccctgccct 2040
 cctaccccaa gccggtgcga gtgtgcgaca gctgccacac cctgctcctg cagcgctgct 2100
 cctccacggc ctctgaacg tccgtcctca ggagcacagc ctcacggaca gtgccaacc 2160
 ctgtgggtct ccaggggctt gggaaatgtg ttctttcca agagtatcaa aggaaagaat 2220
 caaatttctt gcccggtcac tggcactcca gaagacagcg tgccggaacc ggcagctctc 2280
 acctttctgt gacttggtcg gaattaactc ctctggatgg aaacttccat cttacttgg 2340
 tacatcacgg ctctggttca gatacaactt catgattttg ctactatcat ttttacttt 2400
 tcaagaatt taacctattt tacagcagtt cagttctgct agtgagtagt tttccttcc 2460
 taccttcctt ctaaaaacct gattcatgca cagcgtttga cacacatgga gtctgccagt 2520
 gtgccctctc tgcttcagac aagagatctg ccatttcatg cccttgtagc tacctatcat 2580
 tggccctgca ataaaatcat ttatttttca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2640
 aaaaaaaaaa aaaaaaaaaa aactcgag 2668

<210> 157
 <211> 2313
 <212> DNA
 <213> Homo sapien

<400> 157
 gaattcggca ccaggccggg cgggcgcctc agccatggcc ctgcgcaagg aactgctcaa 60
 gtccatctgg tacgccttta ccgcgctgga cgtggagaag agtggcaaa tctccaagtc 120
 ccagctcaag gtgctgtccc acaacctgta cacggtcctg cacatcccc atgaccccg 180
 ggccctggag gaacacttcc gagatgatga tgacggccct gtgtccagcc agggatacat 240
 gccctacctc aacaagtaca tcttggaaca ggtggaggag ggggcttttg ttaaagagca 300
 ctttgatgag ctgtgctgga cgctgacggc caagaagaac tatcgggcag atagcaacgg 360
 gaacagtatg ctctccaatc aggatgcctt ccgctctggt tgccctttca acttctgtc 420
 tgaggacaag taccctctga tcatggttcc tgatgaggtg gaatacctgc tgaaaaagg 480
 actcagcagc atgagcttgg aggtgagctt gggtagctg gagagcttc tggcccagga 540
 ggcccagggt gccagacca ccggggggct cagcgtctgg cagttcctgg agctcttcaa 600
 ttccggccgc tgctgcggg gcgtggggcc ggacaccctc agcatggcca tccacgaggt 660

ctaccaggag	ctcatccaag	atgtcctgaa	gcagggctac	ctgtggaagc	gagggcacct	720
gagaaggaac	tgggccgaac	gctgggtcca	gctgcagccc	agctgcctct	gctactttgg	780
gagtgaagag	tgcaaagaga	aaaggggcat	tatcccgtg	gatgcacact	gctgctgga	840
ggtgctgcca	gaccgcgacg	gaaagcgctg	catgttctgt	gtgaagacag	ccacccgcac	900
gtatgagatg	agcgcctcag	acacgcgcca	gcgccaggag	tggacagctg	ccatccagat	960
ggcgatccgg	ctgcaggccg	aggggaagac	gtccctacac	aaggacctga	agcagaaacg	1020
gcgcgagcag	cgggagcagc	gggagcgcg	ccgggcgcc	aaggagagg	agctgctgcg	1080
gctgcagcag	ctgcaggagg	agaaggagcg	gaagctgcag	gagctggagc	tgctgcagga	1140
ggcgagcgg	caggccgagc	ggctgctgca	ggaggaggag	gaacggcgcc	gcagccagca	1200
ccgcgagctg	cagcaggcgc	tcgagggcca	actgcgcgag	gcggagcagg	cccgggcctc	1260
catgcaggct	gagatggagc	tgaaggagga	ggaggctgcc	cggcagcgcc	agcgcatcaa	1320
ggagctggag	gagatgcagc	agcggttgca	ggaggccctg	caactagagg	tgaaagctcg	1380
gcgagatgaa	gaatctgtgc	gaatcgctca	gaccagactg	ctggaagagg	aggaagagaa	1440
gctgaagcag	ttgatgcagc	tgaaggagga	gcaggagcgc	tacatcgaac	ggcgagcagca	1500
ggagaaggaa	gagctgcagc	aggagatggc	acagcagagc	cgctccctgc	agcaggccca	1560
gcagcagctg	gaggagggtgc	ggcagaaccg	gcagagggct	gacgaggatg	tggaggctgc	1620
ccagagaaaa	ctgcgccagg	ccagcaccaa	cgtgaaacac	tggaaatgtcc	agatgaaccg	1680
gctgatgcat	ccaattgagc	ctggagataa	gcgtccggtc	acaagcagct	ccttctcagg	1740
cttccagccc	cctctgcttg	cccaccgtga	ctcctcccta	aagcgctga	cccgtgggg	1800
atcccagggc	aacaggaccc	cctcgcccaa	cagcaatgag	cagcagaagt	ccctcaatgg	1860
tggggatgag	gctcctgccc	cggcttccac	ccctcaggaa	gataaaactgg	atccagcacc	1920
agaaaattag	cctctcttag	ccccttgctt	ttcccaatgt	catatccacc	aggacctggc	1980
cacagctggc	ctgtgggtga	tcccagctct	tactaggaga	gggagctgag	gtcctggtgc	2040
caggggcccc	ggccctccaa	ccataaacag	tccaggatgg	aacctgggtc	acccttcata	2100
ccagctccaa	gccccagacc	atgggagctg	tctgggatgt	tgatccttga	gaacttggcc	2160
ctgtgcttta	gacccaagga	cccgatccct	gggctaggaa	agagagaaca	agcaagccgg	2220
ggctacctgc	ccccagggtg	ccaccaagtt	gtggaagcac	atttctaaat	aaaaactgct	2280
cttagaatga	aaaaaaaaaa	aaaaaaactc	gag			2313

<210> 158

<211> 2114

<212> DNA

<213> Homo sapien

<400> 158

gaattcggca	cgaggaagaa	ctcgcctctg	ttgagtgtaa	gtagccaaac	aataaccaag	60
gagaataaca	gaaatgtcca	tttgagcac	tcagagcaga	atcctgggtc	atcagcaggt	120
gacacctcag	cagcgcacca	ggtggtttta	ggagaaaact	tgatagccac	agccctttgt	180
ctttctggca	gtgggtctca	gtctgatttg	aaggatgtgg	ccagcacagc	aggagaggag	240
ggggacacaa	gccttcggga	gagcctccat	ccagtcactc	ggtctcttaa	ggcagggtgc	300
catactaagc	agcttgccct	caggaattgc	tctgaagaga	aatccccaca	aacctccatc	360
ctaaaggaag	gtaacaggga	cacaagcttg	gatttccgac	ctgtagtgtc	tccagcaaat	420
ggggttgaag	gagtcaggat	ggatcaggat	gatgatcaag	atagctcttc	cctgaagctt	480
tctcagaaca	ttgctgtaca	gactgacttt	aagacagctg	attcagaggt	aaacacagat	540
caagatatgg	aaaagaattt	ggataaaatg	atgacagaga	gaaccctgtt	gaaagagcgt	600
taccaggagg	tcctggacaa	acagaggcaa	gtggagaatc	agctccaagt	gcaattaaag	660
cagcttcagc	aaaggagaga	agaggaaatg	agaatcacc	aggagatatt	aaaggctatt	720
caggatgtga	caataaagcg	ggaagaaaca	aagaagaaga	tagagaaaga	gaagaaggag	780
tttttgaga	aggagcagga	tctgaaagct	gaaattgaga	agctttgtga	gaagggcaga	840
agagagggtg	gggaaatgga	actggataga	ctcaagaatc	aggatggcga	aataaatagg	900
aacattatgg	aagagactga	acgggcctgg	aaggcagaga	tcttatcact	agagagccgg	960
aaagagttac	tggtactgaa	actagaagaa	gcagaaaaag	aggcagaatt	gcaccttact	1020
tacctcaagt	caactcccc	aacactggag	acagttcgtt	ccaaacagga	gtgggagacg	1080
agactgaatg	gagttcggat	aatgaaaaag	aatgttcgtg	accaatttaa	tagtcatatc	1140


```
<210> 159
<211> 278
<212> DNA
<213> Homo sapien
```

```
<210> 160
<211> 848
<212> DNA
<213> Homo sapien
```

$$\begin{array}{ll} \langle 210 \rangle & 161 \\ \langle 211 \rangle & 432 \end{array}$$

<212> DNA

<213> Homo sapien

<400> 161
 gaattcggca cgagggcaga ccaagatcct ggaggaggac ctggaacaga tcaagctgtc 60
 cttgagagag cgagggccggg agctgaccac tcagaggcag ctgatgcagg aacgggcaga 120
 ggaagggaa ggcaccaagta aagcacagcg cgggagccta gagcacatga agctgacct 180
 gcgtgataag gagaaggagg tggaaatgtca gcaggagcat atccatgaac tccaggagct 240
 caaagaccag ctggagcagc agctccaggg cctgcacagg aaggtaggtg agaccagcct 300
 cctcctgtcc cagcgagagc aggaaatagt ggtcctgcag cagcaactgc aggaagccag 360
 ggaacaaggg gagctgaagg agcagtcact tcagagtcaa ctggatgagg cccagagagc 420
 cctagcccag ag 432

<210> 162

<211> 433

<212> DNA

<213> Homo sapien

<400> 162
 gattcggcac gagccggagc tgggttgctc ctgctcccgt ctccaagtcc tggtagctcc 60
 ttcaagctgg gagagggctc tagtccttgg ttctgaacac tctgggggttc tcgggtgcag 120
 gccgccatga gcaaaccgaa ggccgcgcag gagactctca acgggggaat caccgacatg 180
 ctcacagaac tcgcaaactt tgagaagaac gtgagccaag ctatccacaa gtacaatgct 240
 tacagaaaag cagcatctgt tatagcaaaa taccacacaa aaataaagag tggagctgaa 300
 gctaagaaat tgcctggagt aggaacaaaa attgctgaaa agattgatga gtttttagca 360
 actggaaaat tacgtaaact ggaaaagatt cggcaggatg atacgagttc atccatcaat 420
 ttcctgactc gag 432

<210> 163

<211> 432

<212> DNA

<213> Homo sapien

<400> 163
 gaattcggca ccagatgagg ccaacgaggt gacggacagc gcgtacatgg gctccgagag 60
 cacctacagt gagtgtgaga ccttcacgga cgaggacacc agcaccctgg tgcaccctga 120
 gctgcaacct gaaggggacg cagacagtgc cgggcgctcg gccgtgccct ctgagtgcct 180
 ggacgcatg gaggagcccg accatggtgc cctgctgctg ctcccaggca ggccctaccc 240
 ccatggccag tctgtcatca cggatgatcg gggcgaggag cactttgagg actacggtga 300
 aggcagtgag gcgagctgt ccccagagac cctatgcaac gggcagctgg gctgcagtga 360
 ccccgtttc ctcacgcca gtccgacaaa gcggctctcc agcaagaagg tggcaaggta 420
 cctgcaccag tc 432

<210> 164

<211> 395

<212> DNA

<213> Homo sapien

<400> 164
 gacacttgaa tcatgggtga cgtaaaaaat tttctgtatg cctgggtgtg caaaaggaag 60
 atgaccccat cctatgaaat tagagcagtg gggaacaaaa acaggcagaa attcatgtgt 120
 gaggttcagg tggaagggtta taattacact ggcattggaa attccaccaa taaaaaagat 180
 gcacaaagca atgctgccag agactttgtt aactatttgg ttcgaataaa tgaaataaag 240
 agtgaagaag ttccagcttt tgggtagca tctccgcccc cacttactga tactcctgac 300

actacagcaa atgctgaagg catcttgttg acatcgaata tgactttgat aataaatacc
ggttcctgaa aaaaaaaaaa aaaaaaaaaac tcgag

360
395

<210> 165
<211> 503
<212> DNA
<213> Homo sapien

<400> 165
gaattcggca ccaggaacgc tcggtgagag gcggaggagc ggtaactacc ccggttgccg 60
acagctcggc gctccttccc gctccctcac acaccggcct cagcccgcac cggcagtaga 120
agatggtgaa agaaacaact tactacgatg ttttgggggt caaacccaat gctactcagg 180
aagaattgaa aaaggcttat aggaactgg ccttgaagta ccatcctgat aagaacccaa 240
atgaaggaga gaagttaaaa cagatttctc aagcttacga agttctctct gatgcaaaga 300
aaagggaatt atatgacaaa ggaggagaac aggcaattaa agagggtgga gcagggtggc 360
gttttggtc ccccatggac atctttgata tgttttttgg aggaggagga aggatgcaga 420
gagaaaggag aggtaaaaat gttgtacatc agctctcagt aaccctagaa gacttatata 480
atggtgcaac aagaaaactg gct 503

<210> 166
<211> 893
<212> DNA
<213> Homo sapien

<400> 166
gaattcggca cgagaggaac ttctcttgac gagaagagag accaaggagg ccaagcaggg 60
gctgggccag aggtgccaac atggggaaaac tgaggctcgg ctcggaaggg tgagagttag 120
actacatctc aaaaaaaaaa aaaaaaaaaa aaaagaaaaga aaaaagaaaag 180
aacggaagta gttgtaggta gtggtatggt ggtatgagtc tgttttctgt tacttataac 240
aacaacaaca acaaaaaaacg ctgaaactgg gtaatttata aagaaaagga aaaaagcag 300
aaaaaaatca ggaagaagag aaaggaaaag aagacaaata aatgaaattt atgtattaca 360
gttctgaagg ctgagacatc ccaggccaag ggtccacact tggcgagggc tttcttgctg 420
gtggagactc tttgtggagt cctgggacag tgcagaagga tcacgcctcc ctaccgctcc 480
aagcccagcc ctgagccatg gcatgcccc tggatcaggc cattggcctc ctctggcca 540
tcttccacaa gtactccggc agggagggtg acaagcacac cctgagcaag aaggagctga 600
aggagctgat ccagaaggag ctaccattg gctcgaagct gcaggatgct gaaattgcaa 660
ggctgatgga agacttggac cggaacaagg accaggaggt gaacttccag gagtatgtca 720
ccttctggg ggccttggct ttgatctaca atgaagcct caagggtgga aaataaatag 780
ggaagatgga gacaccctct gggggctctc tctgagtcaa atccagtggg gggtaatgtg 840
acaataaatt ttttttggtc aaatttaaaa aaaaaaaaaa aaaaaaactc gag 893

<210> 167
<211> 549
<212> DNA
<213> Homo sapien

<400> 167
gaattcggca cgagcccaga tcccagggtc cgacagcgcc cggcccagat cccacgcct 60
gccaggagca agccgagagc cagccggccg gcgactccg actccgagca gtctctgtcc 120
ttcgaccgga gcccgcgccc ctttccggga cccctgcccc gcgggcagcg ctgccaacct 180
gcccggccatg gagaccccg cccagcggcg cgccacccgc agcggggcgc aggccagctc 240
cactccgctg tcgcccaccc gcatcaccgg gctgcaggag aaggaggacc tgaggagct 300
caatgatcgc ttggcggtct acatcgaccg tgtgcgctcg ctggaaacgg agaaccgagg 360
gctgcgcctt cgcacaccg agtctgaaga ggtgggtcagc cgcgaggtgt ccggcatcaa 420

ggcgcctac gaggccgagc tcgggggatgc ccgcaagacc cttgactcag tagccaagga 480
 gcgcgcccgc ctgcagctgg agctgagcaa agtgcgtgaa gagtttaagg agctgaaagc 540
 gcgcaatac 549

<210> 168
 <211> 547
 <212> DNA
 <213> Homo sapien

<400> 168
 gaattcggca cgagatggcg gcaggggctcg aagcggcggc ggaggtggcg gcgacggaga 60
 tcaaaatgga ggaagagagc ggcgcgcccgc gcgtgccgag cggcaacggg gctccggggc 120
 ctaagggtga aggagaacga cctgctcaga atgagaagag gaaggagaaa aacataaaaa 180
 gaggaggcaa tcgctttgag ccatatgccca atccaactaa aagatacaga gccttcatta 240
 caaacatacc ttttgatgtg aaatggcagt cacttaaaga cctggttaaa gaaaaagttg 300
 gtgaggtaac atacgtggag ctcttaatgg acgctgaagg aaagtcaagg ggatgtgctg 360
 ttgttgaatt caagatggaa gagagcatga aaaaagctgc ggaagtccta aacaagcata 420
 gtctgagcgg aagaccactg aaagtcaaag aagatcctga tggatgaacat gccaggagag 480
 caatgcaaaa ggctggaaga cttggaagca cagtatttgt agcaaactctg gattataaag 540
 ttggctg 547

<210> 169
 <211> 547
 <212> DNA
 <213> Homo sapien

<400> 169
 gaattcggca ccaggagtcc gactgtgctc gctgctcagc gccgcacccg gaagatgagg 60
 ctgcgcgtgg gagccctgct ggtctgcgcc gtcctggggc tgtgtctggc tgtccctgat 120
 aaaactgtga gatggtgtgc agtgtcggag catgaggcca ctaagtcca gagtttccgc 180
 gaccatatga aaagcgtcat tccatccgat ggtcccagtg ttgcttgtgt gaagaaagcc 240
 tctacacttg attgcatcag ggccattgcg gcaaacgaag cggatgctgt gacactggat 300
 gcaggtttgg tgtatgatgc ttacctggct cccaataacc tgaagcctgt ggtggcagag 360
 ttctatgggt caaaagagga tccacagact ttctattatg ctgttgcgtgt ggtgaagaag 420
 gatagtggct tccagatgaa ccagcttcga ggcaagaagt cctgccacac ggtctagggc 480
 aggtccgctg ggtggaacat ccccataggc ttactttact gtgacttacc tgagccacgt 540
 aaacctc 547

<210> 170
 <211> 838
 <212> DNA
 <213> Homo sapien

<400> 170
 gaattcggca ccagaggagc tcggcctgcg ctgcgccacg atgtccgggg agtcagccag 60
 gagcttgggg aagggaagcg cgccccggg gccgggtccc gagggctcga tccgcatcta 120
 cagcatgagg ttctgcccgt ttgctgagag gacgcgtcta gtccctgaagg ccaaggggaat 180
 caggcatgaa gtcatacaata tcaacctgaa aaataagcct gagtgggtct ttaagaaaaa 240
 tccctttggt ctggtgccag ttctggaaaa cagtcagggt cagctgatct acgagtctgc 300
 catcacctgt gactacctgg atgaagcata cccagggaag aagctgttgc cggatgaccc 360
 ctatgagaaa gcttgccaga agatgatctt agagtgttt tctaagggtgc catccttgg 420
 aggaagcttt attagaagcc aaaataaaga agactatgat ggcctaaaag aagaatttcg 480
 taaagaattt accaagctag aggaggttct gactaataag aagacgacct tctttgggtg 540
 caattctatc tctatgattg attacctcat ctggccctgg tttgaacggc tggaagcaat 600

```
<210> 171
<211> 547
<212> DNA
<213> Homo sapien
```

```
<210> 172
<211> 608
<212> DNA
<213> Homo sapien
```

```
<210> 173
<211> 543
<212> DNA
<213> Homo sapien
```

<400> 173						60
gaattcggca	ccagagatca	tccgccagca	gggtctggcc	tcctacgact	acgtgcgccg	120
ccgcctcacg	gctgaggacc	tgttcgaggc	tcggatcatc	tctctcgaga	cctacaacct	180
gctccgggag	ggcaccagga	gcctccgtga	ggctctcgag	gcggaagtccg	cctggtgcta	240
cctctatggc	acgggctccg	tggctggtgt	ctacctgcc	ggttccaggc	agacactgag	300
catctaccag	gctctcaaga	aagggctgct	gagtgccgag	gtggcccggc	tgctgtgga	360
ggcacaggca	gccacaggct	tcctgctgga	cccgggtgaag	ggggaacggc	tgactgtgga	420
tgaagctgtg	cggaagggcc	tcgtggggcc	cgaactgcac	gaccgcctgc	tctcggtga	480
gcggggcggtc	accggctacc	gtgacccta	caccgagcag	accatctcgc	tcttccaggc	

catgaagaag gaactgatcc ctactgagga ggcctcgcg ctgtggatgc ccagctggcc 540
acc 543

<210> 174
<211> 548
<212> DNA
<213> Homo sapien

<400> 174
gaattcggca cgagaaatgg cggcaggggt cgaagcggcg gcggaggtgg cggcgacgga 60
gatcaaaatg gaggaagaga ggcgcgcgcc cggcgtgccg agcggcaacg gggctccggg 120
ccctaagggt gaaggagaac gacctgctca gaatgagaag aggaaggaga aaaacataaa 180
aagaggaggc aatcgctttg agccatatgc caatccaact aaaagataca gaggcttcat 240
tacaacata ccttttgatg tgaaatggca gtcacttaa gacctggtta aagaaaaagt 300
tggtgaggtg acatacgtgg agctcttaat ggacgtgaa ggaaagtcaa ggggatgtgc 360
tggtgttgaa ttcaagatgg aagagagcat gaaaaaagct gcggaagtcc taaacaagca 420
tagtctgagc ggaagaccac tgaaagtcaa agaagatcct gatggtgaac atgccaggag 480
agcaatgcaa aaggtgatgg ctacgactgg tgggatgggt atgggaccag gtggcccagg 540
aatgatta 548

<210> 175
<211> 604
<212> DNA
<213> Homo sapien

<400> 175
gaattcggca ccagaggacc tccaggacat gttcatcgtc cataccatcg aggagattga 60
gggctgatc tcagcccatg accagttcaa gtccacctg ccggacgccg atagggagcg 120
cgaggccatc ctggccatcc acaaggaggc ccagaggatc gctgagagca accacatcaa 180
gctgtcgggc agcaaccctt acaccaccgt caccgccgaa atcatcaact ccaagtggga 240
gaaggtgcag cagctggtgc caaaacggga ccatgccctc ctggaggagc agagcaagca 300
gcagtcacac gagcacctgc gccgccagtt cgcagccag gccaatggtg tggggccctg 360
gatccagacc aagatggagg agatcgggag catctccatt gagatgaacg ggacctgga 420
ggaccagctg agccacctga agcagtatga acgcagcatc gtggactaca agcccaacct 480
ggacctgctg gagcagcagc accagcttat ccaggaggcc ctcactctcg acaacaagca 540
caccaactat accatggagc acatccgcgt gggctgggag cagctgctca ccaccattgc 600
ccgg 604

<210> 176
<211> 486
<212> DNA
<213> Homo sapien

<400> 176
gaattcggca ccagccaagc tcaactattga atccaagccg ttcaatgtcg cagaggggaa 60
ggaggttctt ctactcgccc acaacctgcc ccagaatcgt attggttaca gctggtacaa 120
aggcgaaaaga gtggatggca acagtctaatt ttaggatata gtaataggaa ctcaacaagc 180
taccacaggc cccgcataca gtggctcgaga gacaatatac cccaatgcat cctgctgat 240
ccagaacgtc acccagaatg acacaggatt ctatacccta caagtcataa agtcagatct 300
tgtgaatgaa gaagcaaccg gacagttcca tgtatacccg gagctgcccc agccctccat 360
ctccagcaac aactccaacc ccgtggagga caaggatgct gtggccttca cctgtgaacc 420
tgaggttcag aacacaacct acctgtggtg ggtaaatggt cagagcctcc cggtcagtc 480
caaggc 486

<210> 177
 <211> 387
 <212> DNA
 <213> Homo sapien

<400> 177	60
gaattcggca ccagggacag cagaccagac agtcacagca gccttgacaa aacgttcctg	120
gaactcaagc tcttctccac agaggaggac agagcagaca gcagagacca tggagtctcc	180
ctcggccctt cccacagat ggtgcatccc ctggcagagg ctccgtctca cagcctcact	240
tctaaccctt tggaaccgc ccaccactgc caagctcact attgaatcca cgccgttcaa	300
tgctgcagag ggggaaggag tgcttctact tgtccacaat ctgccccagc atctttttgg	360
ctacagctgg tacaaagggt aaagagtggg tggcaaccgt caaattatag gatattgta	387
aggaactcaa caagctaccc cagggcc	

<210> 178
 <211> 440
 <212> DNA
 <213> Homo sapien

<400> 178	60
gaattcggca cgaggagaag cagaaaaaca aggaatttag ccagacttta gaaaatgaga	120
aaaatacctt actgagtcag atatcaacaa aggatgggtg actaaaaatg cttcaggagg	180
aagtaaccaa aatgaacctg ttaaatacagc aaatccaaga agaactctct agagttacca	240
aactaaagga gacagcagaa gaagagaaaag atgatttgga agagaggctt atgaatcaat	300
tagcagaact taatggaagc attgggaatt actgtcagga tggtacagat gcccaaataa	360
aaaatgagct attggaatct gaaatgaaga accttaaaaa gtgtgtgagt gaattggaag	420
aagaaaagca gcagtttagtc aaggaaaaaa ctaaggtgga atcagaaata cgaaaggaat	440
atttgagaa aatacaagg	

<210> 179
 <211> 443
 <212> DNA
 <213> Homo sapien

<400> 179	60
gaattcggca ccagcggggg gctacggcgg cggtacggc ggcgtcctga ccgcgtccga	120
cgggctgctg gcgggcaacg agaagctaac catgcagaac ctcaacgacc gcctggcctc	180
ctacctggac aagggtgcgcg ccctggaggc ggccaacggc gagctagagg tgaagatccg	240
cgactggtac cagaagcagg ggctggggc ctcccgcgac tacagccact actacacgac	300
catccaggac ctgcgggaca agattcttg tgccaccatt gagaactcca ggattgtcct	360
gcagatcgac aacgcccgtc tggctgcaga tgacttccga accaagtttg agacggaaca	420
ggctctgcgc atgagcgtgg aggccgacat caacggcctg cgcaggggtg tggatgagct	443
gaccttgcc aggaccgacc tgg	

<210> 180
 <211> 403
 <212> DNA
 <213> Homo sapien

<400> 180	60
gaattcggca cgaggttatg agagtgcact tcaatgttcc tatgaagaac aaccagataa	120
caaacaacca gaggattaag gctgtgtccc caagcatcaa attctgcttg gacaatggag	180
ccaagtgcgt agtccttat agccacctag gccggcctga tgggtgtgcc atgcctgaca	240
agtactcctt agagccagtt gctgtagaac tcagatctct gctgggcaag gatgttctgt	300

tcttgaagga ctgtgtaggc ccagaagtgg agaaagcctg tgccaaccca gctgctgggt 300
 ctgtcatcct gctggagaac ctccgctttc atgtggagga agaagggaag ggaaaagatg 360
 cttctgggaa caaggttaaa gccgagccag ccaaaataga agc 403

<210> 181
 <211> 493
 <212> DNA
 <213> Homo sapien

<400> 181
 gaattcggca ccagcagagg tctccagagc cttctctctc ctgtgcaaaa tggcaactct 60
 taaggaaaaa ctcattgcac cagttgcgga agaagaggca acagttccaa acaataagat 120
 cactgtagtg ggtgttgac aagttggtat ggcgtgtgct atcagcattc tgggaaagtc 180
 tctggtgat gaacttgctc ttgtggatgt tttggaagat aagcttaaag gagaaatgat 240
 ggatctgcag catgggagct tatttcttca gacacctaaa attgtggcag ataaagatta 300
 ttctgtgacc gccaattcta agattgtagt ggtaactgca ggagtccgct agcaagaagg 360
 ggagagtcgg ctcaatctgg tgcagagaaa tgtaatgtc ttcaaattca ttattcctca 420
 gatcgtcaag tacagtcttg attgcatcat aattgtggtt tccaaccagc tggacattct 480
 tacgtatggt acc 493

<210> 182
 <211> 209
 <212> PRT
 <213> Homo sapien

<400> 182
 Ala Phe Ser Ser Asn Pro Lys Val Gln Val Glu Ala Ile Glu Gly Gly
 1 5 10 15
 Ala Leu Gln Lys Leu Leu Val Ile Leu Ala Thr Glu Gln Pro Leu Thr
 20 25 30
 Ala Lys Lys Lys Val Leu Phe Ala Leu Cys Ser Leu Leu Arg His Phe
 35 40 45
 Pro Tyr Ala Gln Arg Gln Phe Leu Lys Leu Gly Gly Leu Gln Val Leu
 50 55 60
 Arg Thr Leu Val Gln Glu Lys Gly Thr Glu Val Leu Ala Val Arg Val
 65 70 75 80
 Val Thr Leu Leu Tyr Asp Leu Val Thr Glu Lys Met Phe Ala Glu Glu
 85 90 95
 Glu Ala Glu Leu Thr Gln Glu Met Ser Pro Glu Lys Leu Gln Gln Tyr
 100 105 110
 Arg Gln Val His Leu Leu Pro Gly Leu Trp Glu Gln Gly Trp Cys Glu
 115 120 125
 Ile Thr Ala His Leu Leu Ala Leu Pro Glu His Asp Ala Arg Glu Lys
 130 135 140
 Val Leu Gln Thr Leu Gly Val Leu Leu Thr Thr Cys Arg Asp Arg Tyr
 145 150 155 160
 Arg Gln Asp Pro Gln Leu Gly Arg Thr Leu Ala Ser Leu Gln Ala Glu
 165 170 175
 Tyr Gln Val Leu Ala Ser Leu Glu Leu Gln Asp Gly Glu Asp Glu Gly
 180 185 190
 Tyr Phe Gln Glu Leu Leu Gly Ser Val Asn Ser Leu Leu Lys Glu Leu
 195 200 205
 Arg

<210> 183
 <211> 255
 <212> PRT
 <213> Homo sapien

<400> 183
 Met Ala Ala Gly Val Glu Ala Ala Ala Glu Val Ala Ala Thr Glu Pro
 1 5 10 15
 Lys Met Glu Glu Glu Ser Gly Ala Pro Cys Val Pro Ser Gly Asn Gly
 20 25 30
 Ala Pro Gly Pro Lys Gly Glu Glu Arg Pro Thr Gln Asn Glu Lys Arg
 35 40 45
 Lys Glu Lys Asn Ile Lys Arg Gly Gly Asn Arg Phe Glu Pro Tyr Ser
 50 55 60
 Asn Pro Thr Lys Arg Tyr Arg Ala Phe Ile Thr Asn Ile Pro Phe Asp
 65 70 75 80
 Val Lys Trp Gln Ser Leu Lys Asp Leu Val Lys Glu Lys Val Gly Glu
 85 90 95
 Val Thr Tyr Val Glu Leu Leu Met Asp Ala Glu Gly Lys Ser Arg Gly
 100 105 110
 Cys Ala Val Val Glu Phe Lys Met Glu Glu Ser Met Lys Lys Ala Ala
 115 120 125
 Glu Val Leu Asn Lys His Ser Leu Ser Gly Arg Pro Leu Lys Val Lys
 130 135 140
 Glu Asp Pro Asp Gly Glu His Ala Arg Arg Ala Met Gln Lys Ala Gly
 145 150 155 160
 Arg Leu Gly Ser Thr Val Phe Val Ala Asn Leu Asp Tyr Lys Val Gly
 165 170 175
 Trp Lys Lys Leu Lys Glu Val Phe Ser Met Ala Gly Val Val Val Arg
 180 185 190
 Ala Asp Ile Leu Glu Asp Lys Asp Gly Lys Ser Arg Gly Ile Gly Ile
 195 200 205
 Val Thr Phe Glu Gln Ser Ile Glu Ala Val Gln Ala Ile Ser Met Phe
 210 215 220
 Asn Gly Gln Leu Leu Phe Asp Arg Pro Met His Val Lys Met Asp Glu
 225 230 235 240
 Arg Ala Leu Pro Lys Gly Asp Phe Phe Pro Pro Glu Arg His Ser
 245 250 255

<210> 184
 <211> 188
 <212> PRT
 <213> Homo sapien

<400> 184
 Leu Ser Gly Ser Cys Ile Arg Arg Glu Gln Thr Pro Glu Lys Glu Lys
 1 5 10 15
 Gln Val Val Leu Phe Glu Glu Ala Ser Trp Thr Cys Thr Pro Ala Cys
 20 25 30
 Gly Asp Glu Pro Arg Thr Val Ile Leu Leu Ser Ser Met Leu Ala Asp
 35 40 45
 His Arg Leu Lys Leu Glu Asp Tyr Lys Asp Arg Leu Lys Ser Gly Glu
 50 55 60

His Leu Asn Pro Asp Gln Leu Glu Ala Val Glu Lys Tyr Glu Glu Val
 65 70 75 80
 Leu His Asn Leu Glu Phe Ala Lys Glu Leu Gln Lys Thr Phe Ser Gly
 85 90 95
 Leu Ser Leu Asp Leu Leu Lys Ala Gln Lys Lys Ala Gln Arg Arg Glu
 100 105 110
 His Met Leu Lys Leu Glu Ala Glu Lys Lys Lys Leu Arg Thr Ile Leu
 115 120 125
 Gln Val Gln Tyr Val Leu Gln Asn Leu Thr Gln Glu His Val Gln Lys
 130 135 140
 Asp Phe Lys Gly Gly Leu Asn Gly Ala Val Tyr Leu Pro Ser Lys Glu
 145 150 155 160
 Leu Asp Tyr Leu Ile Lys Phe Ser Lys Leu Thr Cys Pro Glu Arg Asn
 165 170 175
 Glu Ser Leu Arg Gln Thr Leu Glu Gly Ser Thr Val
 180 185

<210> 185
 <211> 746
 <212> PRT
 <213> Homo sapien

<400> 185
 Asp Lys His Leu Lys Asp Leu Leu Ser Lys Leu Leu Asn Ser Gly Tyr
 1 5 10 15
 Phe Glu Ser Ile Pro Val Pro Lys Asn Ala Lys Glu Lys Glu Val Pro
 20 25 30
 Leu Glu Glu Glu Met Leu Ile Gln Ser Glu Lys Lys Thr Gln Leu Ser
 35 40 45
 Lys Thr Glu Ser Val Lys Glu Ser Glu Ser Leu Met Glu Phe Ala Gln
 50 55 60
 Pro Glu Ile Gln Pro Gln Glu Phe Leu Asn Arg Arg Tyr Met Thr Glu
 65 70 75 80
 Val Asp Tyr Ser Asn Lys Gln Gly Glu Glu Gln Pro Trp Glu Ala Asp
 85 90 95
 Tyr Ala Arg Lys Pro Asn Leu Pro Lys Arg Trp Asp Met Leu Thr Glu
 100 105 110
 Pro Asp Gly Gln Glu Lys Lys Gln Glu Ser Phe Lys Ser Trp Glu Ala
 115 120 125
 Ser Gly Lys His Gln Glu Val Ser Lys Pro Ala Val Ser Leu Glu Gln
 130 135 140
 Arg Lys Gln Asp Thr Ser Lys Leu Arg Ser Thr Leu Pro Glu Glu Gln
 145 150 155 160
 Lys Lys Gln Glu Ile Ser Lys Ser Lys Pro Ser Pro Ser Gln Trp Lys
 165 170 175
 Gln Asp Thr Pro Lys Ser Lys Ala Gly Tyr Val Gln Glu Glu Lys
 180 185 190
 Lys Gln Glu Thr Pro Lys Leu Trp Pro Val Gln Leu Gln Lys Glu Gln
 195 200 205
 Asp Pro Lys Lys Gln Thr Pro Lys Ser Trp Thr Pro Ser Met Gln Ser
 210 215 220
 Glu Gln Asn Thr Thr Lys Ser Trp Thr Thr Pro Met Cys Glu Glu Gln
 225 230 235 240
 Asp Ser Lys Gln Pro Glu Thr Pro Lys Ser Trp Glu Asn Asn Val Glu

1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50
 51
 52
 53
 54
 55
 56
 57
 58
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100

Ser Gln Lys His 245 Ser Leu Thr Ser Gln Ser Gln Ile Ser Pro Lys Ser 255
 260 265 270
 Trp Gly Val Ala Thr Ala Ser Leu Ile Pro Asn Asp Gln Leu Leu Pro
 275 280 285
 Arg Lys Leu Asn Thr Glu Pro Lys Asp Val Pro Lys Pro Val His Gln
 290 295 300
 Pro Val Gly Ser Ser Ser Thr Leu Pro Lys Asp Pro Val Leu Arg Lys
 305 310 315 320
 Glu Lys Leu Gln Asp Leu Met Thr Gln Ile Gln Gly Thr Cys Asn Phe
 325 330 335
 Met Gln Glu Ser Val Leu Asp Phe Asp Lys Pro Ser Ser Ala Ile Pro
 340 345 350
 Thr Ser Gln Pro Pro Ser Ala Thr Pro Gly Ser Pro Val Ala Ser Lys
 355 360 365
 Glu Gln Asn Leu Ser Ser Gln Ser Asp Phe Leu Gln Glu Pro Leu Gln
 370 375 380
 Val Phe Asn Val Asn Ala Pro Leu Pro Pro Arg Lys Glu Gln Glu Ile
 385 390 395 400
 Lys Glu Ser Pro Tyr Ser Pro Gly Tyr Asn Gln Ser Phe Thr Thr Ala
 405 410 415
 Ser Thr Gln Thr Pro Pro Gln Cys Gln Leu Pro Ser Ile His Val Glu
 420 425 430
 Gln Thr Val His Ser Gln Glu Thr Ala Ala Asn Tyr His Pro Asp Gly
 435 440 445
 Thr Ile Gln Val Ser Asn Gly Ser Leu Ala Phe Tyr Pro Ala Gln Thr
 450 455 460
 Asn Val Phe Pro Arg Pro Thr Gln Pro Phe Val Asn Ser Arg Gly Ser
 465 470 475 480
 Val Arg Gly Cys Thr Arg Gly Gly Arg Leu Ile Thr Asn Ser Tyr Arg
 485 490 495
 Ser Pro Gly Gly Tyr Lys Gly Phe Asp Thr Tyr Arg Gly Leu Pro Ser
 500 505 510
 Ile Ser Asn Gly Asn Tyr Ser Gln Leu Gln Phe Gln Ala Arg Glu Tyr
 515 520 525
 Ser Gly Ala Pro Tyr Ser Gln Arg Asp Asn Phe Gln Gln Cys Tyr Lys
 530 535 540
 Arg Gly Gly Thr Ser Gly Gly Pro Arg Ala Asn Ser Arg Ala Gly Trp
 545 550 555 560
 Ser Asp Ser Ser Gln Val Ser Ser Pro Glu Arg Asp Asn Glu Thr Phe
 565 570 575
 Asn Ser Gly Asp Ser Gly Gln Gly Asp Ser Arg Ser Met Thr Pro Val
 580 585 590
 Asp Val Pro Val Thr Asn Pro Ala Ala Thr Ile Leu Pro Val His Val
 595 600 605
 Tyr Pro Leu Pro Gln Gln Met Arg Val Ala Phe Ser Ala Ala Arg Thr
 610 615 620
 Ser Asn Leu Ala Pro Gly Thr Leu Asp Gln Pro Ile Val Phe Asp Leu
 625 630 635 640
 Leu Leu Asn Asn Leu Gly Glu Thr Phe Asp Leu Gln Leu Gly Arg Phe
 645 650 655
 Asn Cys Pro Val Asn Gly Thr Tyr Val Phe Ile Phe His Met Leu Lys
 660 665 670
 Leu Ala Val Asn Val Pro Leu Tyr Val Asn Leu Met Lys Asn Glu Glu

675 680 685
 Val Leu Val Ser Ala Tyr Ala Asn Asp Gly Ala Pro Asp His Glu Thr
 690 695 700
 Ala Ser Asn His Ala Ile Leu Gln Leu Phe Gln Gly Asp Gln Ile Trp
 705 710 715 720
 Leu Arg Leu His Arg Gly Ala Ile Tyr Gly Ser Ser Trp Lys Tyr Ser
 725 730 735
 Thr Phe Ser Gly Tyr Leu Leu Tyr Gln Asp
 740 745

<210> 186
 <211> 705
 <212> PRT
 <213> Homo sapien

<400> 186
 Ala Leu Leu Asn Val Arg Gln Pro Pro Ser Thr Thr Thr Phe Val Leu
 1 5 10 15
 Asn Gln Ile Asn His Leu Pro Pro Leu Gly Ser Thr Ile Val Met Thr
 20 25 30
 Lys Thr Pro Pro Val Thr Thr Asn Arg Gln Thr Ile Thr Leu Thr Lys
 35 40 45
 Phe Ile Gln Thr Thr Ala Ser Thr Arg Pro Ser Val Ser Ala Pro Thr
 50 55 60
 Val Arg Asn Ala Met Thr Ser Ala Pro Ser Lys Asp Gln Val Gln Leu
 65 70 75 80
 Lys Asp Leu Leu Lys Asn Asn Ser Leu Asn Glu Leu Met Lys Leu Lys
 85 90 95
 Pro Pro Ala Asn Ile Ala Gln Pro Val Ala Thr Ala Ala Thr Asp Val
 100 105 110
 Ser Asn Gly Thr Val Lys Lys Glu Ser Ser Asn Lys Glu Gly Ala Arg
 115 120 125
 Met Trp Ile Asn Asp Met Lys Met Arg Ser Phe Ser Pro Thr Met Lys
 130 135 140
 Val Pro Val Val Lys Glu Asp Asp Glu Pro Glu Glu Glu Asp Glu Glu
 145 150 155 160
 Glu Met Gly His Ala Glu Thr Tyr Ala Glu Tyr Met Pro Ile Lys Leu
 165 170 175
 Lys Ile Gly Leu Arg His Pro Asp Ala Val Val Glu Thr Ser Ser Leu
 180 185 190
 Ser Ser Val Thr Pro Pro Asp Val Trp Tyr Lys Thr Ser Ile Ser Glu
 195 200 205
 Glu Thr Ile Asp Asn Gly Trp Leu Ser Ala Leu Gln Leu Glu Ala Ile
 210 215 220
 Thr Tyr Ala Ala Gln Gln His Glu Thr Phe Leu Pro Asn Gly Asp Arg
 225 230 235 240
 Ala Gly Phe Leu Ile Gly Asp Gly Ala Gly Val Gly Lys Gly Arg Thr
 245 250 255
 Ile Ala Gly Ile Ile Tyr Glu Asn Tyr Leu Leu Ser Arg Lys Arg Ala
 260 265 270
 Leu Trp Phe Ser Val Ser Asn Asp Leu Lys Tyr Asp Ala Glu Arg Asp
 275 280 285
 Leu Arg Asp Ile Gly Ala Lys Asn Ile Leu Val His Ser Leu Asn Lys
 290 295 300

Phe Lys Tyr Gly Lys Ile Ser Ser Lys His Asn Gly Ser Val Lys Lys
 305 310 315 320
 Gly Val Ile Phe Ala Thr Tyr Ser Ser Leu Ile Gly Glu Ser Gln Ser
 325 330 335
 Gly Gly Lys Tyr Lys Thr Arg Leu Lys Gln Leu Leu His Trp Cys Gly
 340 345 350
 Asp Asp Phe Asp Gly Val Ile Val Phe Asp Glu Cys His Lys Ala Lys
 355 360 365
 Asn Leu Cys Pro Val Gly Ser Ser Lys Pro Thr Lys Thr Gly Leu Ala
 370 375 380
 Val Leu Glu Leu Gln Asn Lys Leu Pro Lys Ala Arg Val Val Tyr Ala
 385 390 395 400
 Ser Ala Thr Gly Ala Ser Glu Pro Arg Asn Met Ala Tyr Met Asn Arg
 405 410 415
 Leu Gly Ile Trp Gly Glu Gly Thr Pro Phe Arg Glu Phe Ser Asp Phe
 420 425 430
 Ile Gln Ala Val Glu Arg Arg Gly Val Gly Ala Met Glu Ile Val Ala
 435 440 445
 Met Asp Met Lys Leu Arg Gly Met Tyr Ile Ala Arg Gln Leu Ser Phe
 450 455 460
 Thr Gly Val Thr Phe Lys Ile Glu Glu Val Leu Leu Ser Gln Ser Tyr
 465 470 475 480
 Val Lys Met Tyr Asn Lys Ala Val Lys Leu Trp Val Ile Ala Arg Glu
 485 490 495
 Arg Phe Gln Gln Ala Ala Asp Leu Ile Asp Ala Glu Gln Arg Met Lys
 500 505 510
 Lys Ser Met Trp Gly Gln Phe Trp Ser Ala His Gln Arg Phe Phe Lys
 515 520 525
 Tyr Leu Cys Ile Ala Ser Lys Val Lys Arg Val Val Gln Leu Ala Arg
 530 535 540
 Glu Glu Ile Lys Asn Gly Lys Cys Val Val Ile Gly Leu Gln Ser Thr
 545 550 555 560
 Gly Glu Ala Arg Thr Leu Glu Ala Leu Glu Glu Gly Gly Glu Leu
 565 570 575
 Asn Asp Phe Val Ser Thr Ala Lys Gly Val Leu Gln Ser Leu Ile Glu
 580 585 590
 Lys His Phe Pro Ala Pro Asp Arg Lys Lys Leu Tyr Ser Leu Leu Gly
 595 600 605
 Ile Asp Leu Thr Ala Pro Ser Asn Asn Ser Ser Pro Arg Asp Ser Pro
 610 615 620
 Cys Lys Glu Asn Lys Ile Lys Lys Arg Lys Gly Glu Glu Ile Thr Arg
 625 630 635 640
 Glu Ala Lys Lys Ala Arg Lys Val Gly Gly Leu Thr Gly Ser Ser Ser
 645 650 655
 Asp Asp Ser Gly Ser Glu Ser Asp Ala Ser Asp Asn Glu Glu Ser Asp
 660 665 670
 Tyr Glu Ser Ser Lys Asn Met Ser Ser Gly Asp Asp Asp Phe Asn
 675 680 685
 Pro Phe Leu Asp Glu Ser Asn Glu Asp Asp Glu Asn Asp Pro Trp Leu
 690 695 700
 Ile
 705

<211> 595
 <212> PRT
 <213> Homo sapien

<400> 187
 Glu Ser Pro Arg His Arg Gly Glu Gly Gly Gly Glu Trp Gly Pro Gly
 1 5 10 15
 Val Pro Arg Glu Arg Arg Glu Ser Ala Gly Glu Trp Gly Ala Asp Thr
 20 25 30
 Pro Lys Glu Gly Gly Glu Ser Ala Gly Glu Trp Gly Ala Glu Val Pro
 35 40 45
 Arg Gly Arg Gly Glu Gly Ala Gly Glu Trp Gly Pro Asp Thr Pro Lys
 50 55 60
 Glu Arg Gly Gln Gly Val Arg Glu Trp Gly Pro Glu Ile Pro Gln Glu
 65 70 75 80
 His Gly Glu Ala Thr Arg Asp Trp Ala Leu Glu Ser Pro Arg Ala Leu
 85 90 95
 Gly Glu Asp Ala Arg Glu Leu Gly Ser Ser Pro His Asp Arg Gly Ala
 100 105 110
 Ser Pro Arg Asp Leu Ser Gly Glu Ser Pro Cys Thr Gln Arg Ser Gly
 115 120 125
 Leu Leu Pro Glu Arg Arg Gly Asp Ser Pro Trp Pro Pro Trp Pro Ser
 130 135 140
 Pro Gln Glu Arg Asp Ala Gly Thr Arg Asp Arg Glu Glu Ser Pro Arg
 145 150 155 160
 Asp Trp Gly Gly Ala Glu Ser Pro Arg Gly Trp Glu Ala Gly Pro Arg
 165 170 175
 Glu Trp Gly Pro Ser Pro Ser Gly His Gly Asp Gly Pro Arg Arg Arg
 180 185 190
 Pro Arg Lys Arg Arg Gly Arg Lys Gly Arg Met Gly Arg Gln His Glu
 195 200 205
 Ala Ala Ala Thr Ala Ala Thr Ala Ala Thr Ala Thr Gly Gly Thr Ala
 210 215 220
 Glu Glu Ala Gly Ala Ser Ala Pro Glu Ser Gln Ala Gly Gly Gly Pro
 225 230 235 240
 Arg Gly Arg Ala Arg Gly Pro Arg Gln Gln Gly Arg Arg Arg His Gly
 245 250 255
 Thr Gln Arg Arg Arg Gly Pro Pro Gln Ala Arg Glu Glu Gly Pro Arg
 260 265 270
 Asp Ala Thr Thr Ile Leu Gly Leu Gly Thr Pro Ser Gly Glu Gln Arg
 275 280 285
 Ala Asp Gln Ser Gln Ala Leu Pro Ala Leu Ala Gly Ala Ala Ala Ala
 290 295 300
 His Ala His Ala Ile Pro Gly Ala Gly Pro Ala Ala Pro Val Gly
 305 310 315 320
 Gly Arg Gly Arg Arg Gly Gly Trp Arg Gly Gly Arg Arg Gly Gly Ser
 325 330 335
 Ala Gly Ala Gly Gly Gly Gly Arg Gly Gly Arg Gly Arg Gly Arg Gly
 340 345 350
 Gly Gly Arg Gly Gly Gly Gly Ala Gly Arg Gly Gly Gly Ala Ala Gly
 355 360 365
 Pro Arg Glu Gly Ala Ser Ser Pro Gly Ala Arg Arg Gly Glu Gln Arg
 370 375 380
 Arg Arg Gly Arg Gly Pro Pro Ala Ala Gly Ala Ala Gln Val Ser Ala

385
 Arg Gly Arg Arg Ala Arg Gly Gln Arg Ala Gly Glu Glu Ala Gln Asp
 Gly Leu Leu Pro Arg Gly Arg Asp Arg Leu Pro Leu Arg Pro Gly Asp
 Ala Asn Gln Arg Ala Glu Arg Pro Gly Pro Pro Arg Gly Gly His Gly
 Pro Val Asn Ala Ser Ser Ala Pro Asp Thr Ser Pro Pro Arg His Pro
 Arg Arg Trp Val Ser Gln Gln Arg Gln Arg Leu Trp Arg Gln Phe Arg
 Val Gly Gly Gly Phe Pro Pro Pro Pro Ser Arg Pro Pro Ala Val
 Leu Leu Pro Leu Leu Arg Leu Ala Cys Ala Gly Asp Pro Gly Ala Thr
 Arg Pro Gly Pro Arg Arg Pro Ala Arg Arg Pro Arg Gly Glu Leu Ile
 Pro Arg Arg Pro Asp Pro Ala Ala Pro Ser Glu Glu Gly Leu Arg Met
 Glu Ser Ser Val Asp Asp Gly Ala Thr Ala Thr Thr Ala Asp Ala Ala
 Ser Gly Glu Ala Pro Glu Ala Gly Pro Ser Pro Ser His Ser Pro Thr
 Met Cys Gln Thr Gly Gly Pro Gly Pro Pro Pro Pro Gln Pro Pro Arg
 Trp Leu Pro
 390
 405
 420
 435
 450
 465
 475
 480
 485
 500
 515
 530
 545
 565
 580
 595

<210> 188
 <211> 376
 <212> PRT
 <213> Homo sapien

<400> 188
 Glu Met Arg Lys Phe Asp Val Pro Ser Met Glu Ser Thr Leu Asn Gln
 1 5 10 15
 Pro Ala Met Leu Glu Thr Leu Tyr Ser Asp Pro His Tyr Arg Ala His
 20 25 30
 Phe Pro Asn Pro Arg Pro Asp Thr Asn Lys Asp Val Tyr Lys Val Leu
 35 40 45
 Pro Glu Ser Lys Lys Ala Pro Gly Ser Gly Ala Val Phe Glu Arg Asn
 50 55 60
 Gly Pro His Ala Ser Ser Ser Gly Val Leu Pro Leu Gly Leu Gln Pro
 65 70 75 80
 Ala Pro Gly Leu Ser Lys Ser Leu Ser Ser Gln Val Trp Gln Pro Ser
 85 90 95
 Pro Asp Pro Trp His Pro Gly Glu Gln Ser Cys Glu Leu Ser Thr Cys
 100 105 110
 Arg Gln Gln Leu Glu Leu Ile Arg Leu Gln Met Glu Gln Met Gln Leu
 115 120 125
 Gln Asn Gly Ala Met Cys His His Pro Ala Ala Phe Ala Pro Leu Leu
 130 135 140
 Pro Thr Leu Glu Pro Ala Gln Trp Leu Ser Ile Leu Asn Ser Asn Glu
 145 150 155 160

His Leu Leu Lys Glu Lys Glu Leu Leu Ile Asp Lys Gln Arg Lys His
 165 170 175
 Ile Ser Gln Leu Glu Gln Lys Val Arg Glu Ser Glu Leu Gln Val His
 180 185 190
 Ser Ala Leu Leu Gly Arg Pro Ala Pro Phe Gly Asp Val Cys Leu Leu
 195 200 205
 Arg Leu Gln Glu Leu Gln Arg Glu Asn Thr Phe Leu Arg Ala Gln Phe
 210 215 220
 Ala Gln Lys Thr Glu Ala Leu Ser Lys Glu Lys Met Glu Leu Glu Lys
 225 230 235 240
 Lys Leu Ser Ala Ser Glu Val Glu Ile Gln Leu Ile Arg Glu Ser Leu
 245 250 255
 Lys Val Thr Leu Gln Lys His Ser Glu Glu Gly Lys Lys Gln Glu Glu
 260 265 270
 Arg Val Lys Gly Arg Asp Lys His Ile Asn Asn Leu Lys Lys Lys Cys
 275 280 285
 Gln Lys Glu Ser Glu Gln Asn Arg Glu Lys Gln Gln Arg Ile Glu Thr
 290 295 300
 Leu Glu Arg Tyr Leu Ala Asp Leu Pro Thr Leu Glu Asp His Gln Lys
 305 310 315 320
 Gln Thr Glu Gln Leu Lys Asp Ala Glu Leu Lys Asn Thr Glu Leu Gln
 325 330 335
 Glu Arg Val Ala Glu Leu Glu Thr Leu Leu Glu Asp Thr Gln Ala Thr
 340 345 350
 Cys Arg Glu Lys Glu Val Gln Leu Glu Ser Leu Arg Gln Arg Glu Ala
 355 360 365
 Asp Leu Ser Ser Ala Arg His Arg
 370 375

<210> 189
 <211> 160
 <212> PRT
 <213> Homo sapien

<400> 189
 Met Leu Glu Ala His Arg Arg Gln Arg His Pro Phe Leu Leu Leu Gly
 1 5 10 15
 Thr Thr Ala Asn Arg Thr Gln Ser Leu Asn Tyr Gly Cys Ile Val Glu
 20 25 30
 Asn Pro Gln Thr His Glu Val Leu His Tyr Val Glu Lys Pro Ser Thr
 35 40 45
 Phe Ile Ser Asp Ile Ile Asn Cys Gly Ile Tyr Leu Phe Ser Pro Glu
 50 55 60
 Ala Leu Lys Pro Leu Arg Asp Val Phe Gln Arg Asn Gln Gln Asp Gly
 65 70 75 80
 Gln Leu Glu Asp Ser Pro Gly Leu Trp Pro Gly Ala Gly Thr Ile Arg
 85 90 95
 Leu Glu Gln Asp Val Phe Ser Ala Leu Ala Gly Gln Gly Gln Ile Tyr
 100 105 110
 Val His Leu Thr Asp Gly Ile Trp Ser Gln Ile Lys Ser Ala Gly Ser
 115 120 125
 Ala Leu Tyr Ala Ser Arg Leu Tyr Leu Ser Arg Tyr Gln Asp Thr His
 130 135 140
 Pro Glu Arg Leu Ala Lys His Thr Pro Gly Gly Pro Trp Ile Arg Gly

145

150

155

160

<210> 190
 <211> 146
 <212> PRT
 <213> Homo sapien

<400> 190
 Met Asp Pro Arg Ala Ser Leu Leu Leu Leu Gly Asn Val Tyr Ile His
 1 5 10 15
 Pro Thr Ala Lys Val Ala Pro Ser Ala Val Leu Gly Pro Asn Val Ser
 20 25 30
 Ile Gly Lys Gly Val Thr Val Gly Glu Gly Val Arg Leu Arg Glu Ser
 35 40 45
 Ile Val Leu His Gly Ala Thr Leu Gln Glu His Thr Cys Val Leu His
 50 55 60
 Ser Ile Val Gly Trp Gly Ser Thr Val Gly Arg Trp Ala Arg Val Glu
 65 70 75 80
 Gly Thr Pro Ser Asp Pro Asn Pro Asn Asp Pro Arg Ala Arg Met Asp
 85 90 95
 Ser Glu Ser Leu Phe Lys Asp Gly Lys Leu Leu Pro Ala Ile Thr Ile
 100 105 110
 Leu Gly Cys Arg Val Arg Ile Pro Ala Glu Val Leu Ile Leu Asn Ser
 115 120 125
 Ile Val Leu Pro His Lys Glu Leu Ser Arg Ser Phe Thr Asn Gln Ile
 130 135 140
 Ile Leu
 145

<210> 191
 <211> 704
 <212> PRT
 <213> Homo sapien

<400> 191
 Glu Gly Gly Cys Ala Ala Gly Arg Gly Arg Glu Leu Glu Pro Glu Leu
 1 5 10 15
 Glu Pro Gly Pro Gly Pro Gly Ser Ala Leu Glu Pro Gly Glu Glu Phe
 20 25 30
 Glu Ile Val Asp Arg Ser Gln Leu Pro Gly Pro Gly Asp Leu Arg Ser
 35 40 45
 Ala Thr Arg Pro Arg Ala Ala Glu Gly Trp Ser Ala Pro Ile Leu Thr
 50 55 60
 Leu Ala Arg Arg Ala Thr Gly Asn Leu Ser Ala Ser Cys Gly Ser Ala
 65 70 75 80
 Leu Arg Ala Ala Ala Gly Leu Gly Gly Gly Asp Ser Gly Asp Gly Thr
 85 90 95
 Ala Arg Ala Ala Ser Lys Cys Gln Met Met Glu Glu Arg Ala Asn Leu
 100 105 110
 Met His Met Met Lys Leu Ser Ile Lys Val Leu Leu Gln Ser Ala Leu
 115 120 125
 Ser Leu Gly Arg Ser Leu Asp Ala Asp His Ala Pro Leu Gln Gln Phe
 130 135 140
 Phe Val Val Met Glu His Cys Leu Lys His Gly Leu Lys Val Lys Lys

145 Ser Phe Ile Gly 150 Gln Asn Lys Ser Phe Phe Gly Pro Leu Glu Leu Val
 165 Glu Lys Leu Cys Pro Glu Ala Ser Asp Ile Ala Thr Ser Val Arg Asn
 180 Leu Pro Glu Leu Lys Thr Ala Val Gly Arg Gly Arg Ala Trp Leu Tyr
 195 Leu Ala Leu Met Gln Lys Lys Leu Ala Asp Tyr Leu Lys Val Leu Ile
 210 Asp Asn Lys His Leu Leu Ser Glu Phe Tyr Glu Pro Glu Ala Leu Met
 225 Met Glu Glu Glu Gly Met Val Ile Val Gly Leu Leu Val Gly Leu Asn
 245 Val Leu Asp Ala Asn Leu Cys Leu Lys Gly Glu Asp Leu Asp Ser Gln
 260 Val Gly Val Ile Asp Phe Ser Leu Tyr Leu Lys Asp Val Gln Asp Leu
 275 Asp Gly Gly Lys Glu His Glu Arg Ile Thr Asp Val Leu Asp Gln Lys
 290 Asn Tyr Val Glu Glu Leu Asn Arg His Leu Ser Cys Thr Val Gly Asp
 305 Leu Gln Thr Lys Ile Asp Gly Leu Glu Lys Thr Asn Ser Lys Leu Gln
 325 Glu Glu Leu Ser Ala Ala Thr Asp Arg Ile Cys Ser Leu Gln Glu Glu
 340 Gln Gln Gln Leu Arg Glu Gln Asn Glu Leu Ile Arg Glu Arg Ser Glu
 355 Lys Ser Val Glu Ile Thr Lys Gln Asp Thr Lys Val Glu Leu Glu Thr
 370 Tyr Lys Gln Thr Arg Gln Gly Leu Asp Glu Met Tyr Ser Asp Val Trp
 385 Lys Gln Leu Lys Glu Glu Lys Lys Val Arg Leu Glu Leu Glu Lys Glu
 405 Leu Glu Leu Gln Ile Gly Met Lys Thr Glu Met Glu Ile Ala Met Lys
 420 Leu Leu Glu Lys Asp Thr His Glu Lys Gln Asp Thr Leu Val Ala Leu
 435 Arg Gln Gln Leu Glu Glu Val Lys Ala Ile Asn Leu Gln Met Phe His
 450 Lys Ala Gln Asn Ala Glu Ser Ser Leu Gln Gln Lys Asn Glu Ala Ile
 465 Thr Ser Phe Glu Gly Lys Thr Asn Gln Val Met Ser Ser Met Lys Gln
 485 Met Glu Glu Arg Leu Gln His Ser Glu Arg Ala Arg Gln Gly Ala Glu
 500 Glu Arg Ser His Lys Leu Gln Gln Glu Leu Gly Gly Arg Ile Gly Ala
 515 Leu Gln Leu Gln Leu Ser Gln Leu His Glu Gln Cys Ser Ser Leu Glu
 530 Lys Glu Leu Lys Ser Glu Lys Glu Gln Arg Gln Ala Leu Gln Arg Glu
 545 Leu Gln His Glu Lys Asp Thr Ser Ser Leu Leu Arg Met Glu Leu Gln
 565 Gln Val Glu Gly Leu Lys Lys Glu Leu Arg Glu Leu Gln Asp Glu Lys

580 585 590
 Ala Glu Leu Gln Lys Ile Cys Glu Glu Gln Glu Gln Ala Leu Gln Glu
 595 600 605
 Met Gly Leu His Leu Ser Gln Ser Lys Leu Lys Met Glu Asp Ile Lys
 610 615 620
 Glu Val Asn Gln Ala Leu Lys Gly His Ala Trp Leu Lys Asp Asp Glu
 625 630 635 640
 Ala Thr His Cys Arg Gln Cys Glu Lys Glu Phe Ser Ile Ser Arg Arg
 645 650 655
 Lys His His Cys Arg Asn Cys Gly His Ile Phe Cys Asn Thr Cys Ser
 660 665 670
 Ser Asn Glu Leu Ala Leu Pro Ser Tyr Pro Lys Pro Val Arg Val Cys
 675 680 685
 Asp Ser Cys His Thr Leu Leu Gln Arg Cys Ser Ser Thr Ala Ser
 690 695 700

<210> 192
 <211> 331
 <212> PRT
 <213> Homo sapien

<400> 192
 Arg Ala Gly Ala Ser Ala Met Ala Leu Arg Lys Glu Leu Leu Lys Ser
 1 5 10 15
 Ile Trp Tyr Ala Phe Thr Ala Leu Asp Val Glu Lys Ser Gly Lys Val
 20 25 30
 Ser Lys Ser Gln Leu Lys Val Leu Ser His Asn Leu Tyr Thr Val Leu
 35 40 45
 His Ile Pro His Asp Pro Val Ala Leu Glu Glu His Phe Arg Asp Asp
 50 55 60
 Asp Asp Gly Pro Val Ser Ser Gln Gly Tyr Met Pro Tyr Leu Asn Lys
 65 70 75 80
 Tyr Ile Leu Asp Lys Val Glu Glu Gly Ala Phe Val Lys Glu His Phe
 85 90 95
 Asp Glu Leu Cys Trp Thr Leu Thr Ala Lys Lys Asn Tyr Arg Ala Asp
 100 105 110
 Ser Asn Gly Asn Ser Met Leu Ser Asn Gln Asp Ala Phe Arg Leu Trp
 115 120 125
 Cys Leu Phe Asn Phe Leu Ser Glu Asp Lys Tyr Pro Leu Ile Met Val
 130 135 140
 Pro Asp Glu Val Glu Tyr Leu Leu Lys Lys Val Leu Ser Ser Met Ser
 145 150 155 160
 Leu Glu Val Ser Leu Gly Glu Leu Glu Glu Leu Leu Ala Gln Glu Ala
 165 170 175
 Gln Val Ala Gln Thr Thr Gly Gly Leu Ser Val Trp Gln Phe Leu Glu
 180 185 190
 Leu Phe Asn Ser Gly Arg Cys Leu Arg Gly Val Gly Arg Asp Thr Leu
 195 200 205
 Ser Met Ala Ile His Glu Val Tyr Gln Glu Leu Ile Gln Asp Val Leu
 210 215 220
 Lys Gln Gly Tyr Leu Trp Lys Arg Gly His Leu Arg Arg Asn Trp Ala
 225 230 235 240
 Glu Arg Trp Phe Gln Leu Gln Pro Ser Cys Leu Cys Tyr Phe Gly Ser
 245 250 255

1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50
 51
 52
 53
 54
 55
 56
 57
 58
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100

Glu Glu Cys Lys Glu Lys Arg Gly Ile Ile Pro Leu Asp Ala His Cys
 260 265 270
 Cys Val Glu Val Leu Pro Asp Arg Asp Gly Lys Arg Cys Met Phe Cys
 275 280 285
 Val Lys Thr Ala Thr Arg Thr Tyr Glu Met Ser Ala Ser Asp Thr Arg
 290 295 300
 Gln Arg Gln Glu Trp Thr Ala Ala Ile Gln Met Ala Ile Arg Leu Gln
 305 310 315 320
 Ala Glu Gly Lys Thr Ser Leu His Lys Asp Leu
 325 330

<210> 193
 <211> 475
 <212> PRT
 <213> Homo sapien

<400> 193
 Lys Asn Ser Pro Leu Leu Ser Val Ser Ser Gln Thr Ile Thr Lys Glu
 1 5 10 15
 Asn Asn Arg Asn Val His Leu Glu His Ser Glu Gln Asn Pro Gly Ser
 20 25 30
 Ser Ala Gly Asp Thr Ser Ala Ala His Gln Val Val Leu Gly Glu Asn
 35 40 45
 Leu Ile Ala Thr Ala Leu Cys Leu Ser Gly Ser Gly Ser Gln Ser Asp
 50 55 60
 Leu Lys Asp Val Ala Ser Thr Ala Gly Glu Glu Gly Asp Thr Ser Leu
 65 70 75 80
 Arg Glu Ser Leu His Pro Val Thr Arg Ser Leu Lys Ala Gly Cys His
 85 90 95
 Thr Lys Gln Leu Ala Ser Arg Asn Cys Ser Glu Glu Lys Ser Pro Gln
 100 105 110
 Thr Ser Ile Leu Lys Glu Gly Asn Arg Asp Thr Ser Leu Asp Phe Arg
 115 120 125
 Pro Val Val Ser Pro Ala Asn Gly Val Glu Gly Val Arg Val Asp Gln
 130 135 140
 Asp Asp Asp Gln Asp Ser Ser Ser Leu Lys Leu Ser Gln Asn Ile Ala
 145 150 155 160
 Val Gln Thr Asp Phe Lys Thr Ala Asp Ser Glu Val Asn Thr Asp Gln
 165 170 175
 Asp Ile Glu Lys Asn Leu Asp Lys Met Met Thr Glu Arg Thr Leu Leu
 180 185 190
 Lys Glu Arg Tyr Gln Glu Val Leu Asp Lys Gln Arg Gln Val Glu Asn
 195 200 205
 Gln Leu Gln Val Gln Leu Lys Gln Leu Gln Gln Arg Arg Glu Glu Glu
 210 215 220
 Met Lys Asn His Gln Glu Ile Leu Lys Ala Ile Gln Asp Val Thr Ile
 225 230 235 240
 Lys Arg Glu Glu Thr Lys Lys Lys Ile Glu Lys Glu Lys Lys Glu Phe
 245 250 255
 Leu Gln Lys Glu Gln Asp Leu Lys Ala Glu Ile Glu Lys Leu Cys Glu
 260 265 270
 Lys Gly Arg Arg Glu Val Trp Glu Met Glu Leu Asp Arg Leu Lys Asn
 275 280 285
 Gln Asp Gly Glu Ile Asn Arg Asn Ile Met Glu Glu Thr Glu Arg Ala

1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50
 51
 52
 53
 54
 55
 56
 57
 58
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100

```
<210> 194
<211> 241
<212> PRT
<213> Homo sapien
```

<400> 194

Met Ser Gly Glu Ser Ala Arg Ser Leu Gly Lys Gly Ser Ala Pro 15
1 5 10
Gly Pro Val Pro Glu Gly Ser Ile Arg Ile Tyr Ser Met Arg Phe Cys 30
20 25
Pro Phe Ala Glu Arg Thr Arg Leu Val Leu Lys Ala Lys Gly Ile Arg 45
35 40
His Glu Val Ile Asn Ile Asn Leu Lys Asn Lys Pro Glu Trp Phe Phe 60
50 55
Lys Lys Asn Pro Phe Gly Leu Val Pro Val Leu Glu Asn Ser Gln Gly 80
65 70
Gln Leu Ile Tyr Glu Ser Ala Ile Thr Cys Glu Tyr Leu Asp Glu Ala 95
85
Tyr Pro Gly Lys Lys Leu Leu Pro Asp Asp Pro Tyr Glu Lys Ala Cys 110
100
Gln Lys Met Ile Leu Glu Leu Phe Ser Lys Val Pro Ser Leu Val Gly 125
115
Ser Phe Ile Arg Ser Gln Asn Lys Glu Asp Tyr Ala Gly Leu Lys Glu 140
130
Glu Phe Arg Lys Glu Phe Thr Lys Leu Glu Glu Val Leu Thr Asn Lys 160
145 150
Lys Thr Thr Phe Phe Gly Gly Asn Ser Ile Ser Met Ile Asp Tyr Leu 175
165
Ile Trp Pro Trp Phe Glu Arg Leu Glu Ala Met Lys Leu Asn Glu Cys 190
180

Val Asp His Thr Pro Lys Leu Lys Leu Trp Met Ala Ala Met Lys Glu
 195 200 205
 Asp Pro Thr Val Ser Ala Leu Leu Thr Ser Glu Lys Asp Trp Gln Gly
 210 215 220
 Phe Leu Glu Leu Tyr Leu Gln Asn Ser Pro Glu Ala Cys Asp Tyr Gly
 225 230 235 240
 Leu

<210> 195
 <211> 138
 <212> PRT
 <213> Homo sapien

<400> 195
 Gln Thr Lys Ile Leu Glu Glu Asp Leu Glu Gln Ile Lys Leu Ser Leu
 1 5 10 15
 Arg Glu Arg Gly Arg Glu Leu Thr Thr Gln Arg Gln Leu Met Gln Glu
 20 25 30
 Arg Ala Glu Glu Gly Lys Gly Pro Ser Lys Ala Gln Arg Gly Ser Leu
 35 40 45
 Glu His Met Lys Leu Ile Leu Arg Asp Lys Glu Lys Glu Val Glu Cys
 50 55 60
 Gln Gln Glu His Ile His Glu Leu Gln Glu Leu Lys Asp Gln Leu Glu
 65 70 75 80
 Gln Gln Leu Gln Gly Leu His Arg Lys Val Gly Glu Thr Ser Leu Leu
 85 90 95
 Leu Ser Gln Arg Glu Gln Glu Ile Val Val Leu Gln Gln Gln Leu Gln
 100 105 110
 Glu Ala Arg Glu Gln Gly Glu Leu Lys Glu Gln Ser Leu Gln Ser Gln
 115 120 125
 Leu Asp Glu Ala Gln Arg Ala Leu Ala Gln
 130 135

<210> 196
 <211> 102
 <212> PRT
 <213> Homo sapien

<400> 196
 Met Ser Lys Arg Lys Ala Pro Gln Glu Thr Leu Asn Gly Gly Ile Thr
 1 5 10 15
 Asp Met Leu Thr Glu Leu Ala Asn Phe Glu Lys Asn Val Ser Gln Ala
 20 25 30
 Ile His Lys Tyr Asn Ala Tyr Arg Lys Ala Ala Ser Val Ile Ala Lys
 35 40 45
 Tyr Pro His Lys Ile Lys Ser Gly Ala Glu Ala Lys Lys Leu Pro Gly
 50 55 60
 Val Gly Thr Lys Ile Ala Glu Lys Ile Asp Glu Phe Leu Ala Thr Gly
 65 70 75 80
 Lys Leu Arg Lys Leu Glu Lys Ile Arg Gln Asp Asp Thr Ser Ser Ser
 85 90 95
 Ile Asn Phe Leu Thr Arg
 100

<210> 197
 <211> 138
 <212> PRT
 <213> Homo sapien

<400> 197
 Glu Ala Asn Glu Val Thr Asp Ser Ala Tyr Met Gly Ser Glu Ser Thr
 1 5 10 15
 Tyr Ser Glu Cys Glu Thr Phe Thr Asp Glu Asp Thr Ser Thr Leu Val
 20 25 30
 His Pro Glu Leu Gln Pro Glu Gly Asp Ala Asp Ser Ala Gly Gly Ser
 35 40 45
 Ala Val Pro Ser Glu Cys Leu Asp Ala Met Glu Glu Pro Asp His Gly
 50 55 60
 Ala Leu Leu Leu Leu Pro Gly Arg Pro His Pro His Gly Gln Ser Val
 65 70 75 80
 Ile Thr Val Ile Gly Gly Glu Glu His Phe Glu Asp Tyr Gly Glu Gly
 85 90 95
 Ser Glu Ala Glu Leu Ser Pro Glu Thr Leu Cys Asn Gly Gln Leu Gly
 100 105 110
 Cys Ser Asp Pro Ala Phe Leu Thr Pro Ser Pro Thr Lys Arg Leu Ser
 115 120 125
 Ser Lys Lys Val Ala Arg Tyr Leu His Gln
 130 135

<210> 198
 <211> 100
 <212> PRT
 <213> Homo sapien

<400> 198
 Met Gly Asp Val Lys Asn Phe Leu Tyr Ala Trp Cys Gly Lys Arg Lys
 1 5 10 15
 Met Thr Pro Ser Tyr Glu Ile Arg Ala Val Gly Asn Lys Asn Arg Gln
 20 25 30
 Lys Phe Met Cys Glu Val Gln Val Glu Gly Tyr Asn Tyr Thr Gly Met
 35 40 45
 Gly Asn Ser Thr Asn Lys Lys Asp Ala Gln Ser Asn Ala Ala Arg Asp
 50 55 60
 Phe Val Asn Tyr Leu Val Arg Ile Asn Glu Ile Lys Ser Glu Glu Val
 65 70 75 80
 Pro Ala Phe Gly Val Ala Ser Pro Pro Pro Leu Thr Asp Thr Pro Asp
 85 90 95
 Thr Thr Ala Asn
 100

<210> 199
 <211> 127
 <212> PRT
 <213> Homo sapien

<400> 199
 Met Val Lys Glu Thr Thr Tyr Tyr Asp Val Leu Gly Val Lys Pro Asn

1 5 10 15
 Ala Thr Gln Glu Glu Leu Lys Lys Ala Tyr Arg Lys Leu Ala Leu Lys
 20 25 30
 Tyr His Pro Asp Lys Asn Pro Asn Glu Gly Glu Lys Phe Lys Gln Ile
 35 40 45
 Ser Gln Ala Tyr Glu Val Leu Ser Asp Ala Lys Lys Arg Glu Leu Tyr
 50 55 60
 Asp Lys Gly Gly Glu Gln Ala Ile Lys Glu Gly Gly Ala Gly Gly Gly
 65 70 75 80
 Phe Gly Ser Pro Met Asp Ile Phe Asp Met Phe Phe Gly Gly Gly Gly
 85 90 95
 Arg Met Gln Arg Glu Arg Arg Gly Lys Asn Val Val His Gln Leu Ser
 100 105 110
 Val Thr Leu Glu Asp Leu Tyr Asn Gly Ala Thr Arg Lys Leu Ala
 115 120 125

<210> 200
 <211> 90
 <212> PRT
 <213> Homo sapien

<400> 200
 Met Ala Cys Pro Leu Asp Gln Ala Ile Gly Leu Leu Val Ala Ile Phe
 1 5 10 15
 His Lys Tyr Ser Gly Arg Glu Gly Asp Lys His Thr Leu Ser Lys Lys
 20 25 30
 Glu Leu Lys Glu Leu Ile Gln Lys Glu Leu Thr Ile Gly Ser Lys Leu
 35 40 45
 Gln Asp Ala Glu Ile Ala Arg Leu Met Glu Asp Leu Asp Arg Asn Lys
 50 55 60
 Asp Gln Glu Val Asn Phe Gln Glu Tyr Val Thr Phe Leu Gly Ala Leu
 65 70 75 80
 Ala Leu Ile Tyr Asn Glu Ala Leu Lys Gly
 85 90

<210> 201
 <211> 120
 <212> PRT
 <213> Homo sapien

<400> 201
 Met Glu Thr Pro Ser Gln Arg Arg Ala Thr Arg Ser Gly Ala Gln Ala
 1 5 10 15
 Ser Ser Thr Pro Leu Ser Pro Thr Arg Ile Thr Arg Leu Gln Glu Lys
 20 25 30
 Glu Asp Leu Gln Glu Leu Asn Asp Arg Leu Ala Val Tyr Ile Asp Arg
 35 40 45
 Val Arg Ser Leu Glu Thr Glu Asn Ala Gly Leu Arg Leu Arg Ile Thr
 50 55 60
 Glu Ser Glu Glu Val Val Ser Arg Glu Val Ser Gly Ile Lys Ala Ala
 65 70 75 80
 Tyr Glu Ala Glu Leu Gly Asp Ala Arg Lys Thr Leu Asp Ser Val Ala
 85 90 95
 Lys Glu Arg Ala Arg Leu Gln Leu Glu Leu Ser Lys Val Arg Glu Glu

100 105 110
 Phe Lys Glu Leu Lys Ala Arg Asn
 115 120

<210> 202
 <211> 177
 <212> PRT
 <213> Homo sapien

<400> 202
 Met Ala Ala Gly Val Glu Ala Ala Ala Glu Val Ala Ala Thr Glu Ile
 1 5 10 15
 Lys Met Glu Glu Glu Ser Gly Ala Pro Gly Val Pro Ser Gly Asn Gly
 20 25 30
 Ala Pro Gly Pro Lys Gly Glu Gly Glu Arg Pro Ala Gln Asn Glu Lys
 35 40 45
 Arg Lys Glu Lys Asn Ile Lys Arg Gly Gly Asn Arg Phe Glu Pro Tyr
 50 55 60
 Ala Asn Pro Thr Lys Arg Tyr Arg Ala Phe Ile Thr Asn Ile Pro Phe
 65 70 75 80
 Asp Val Lys Trp Gln Ser Leu Lys Asp Leu Val Lys Glu Lys Val Gly
 85 90 95
 Glu Val Thr Tyr Val Glu Leu Leu Met Asp Ala Glu Gly Lys Ser Arg
 100 105 110
 Gly Cys Ala Val Val Glu Phe Lys Met Glu Glu Ser Met Lys Lys Ala
 115 120 125
 Ala Glu Val Leu Asn Lys His Ser Leu Ser Gly Arg Pro Leu Lys Val
 130 135 140
 Lys Glu Asp Pro Asp Gly Glu His Ala Arg Arg Ala Met Gln Lys Ala
 145 150 155 160
 Gly Arg Leu Gly Ser Thr Val Phe Val Ala Asn Leu Asp Tyr Lys Val
 165 170 175
 Gly

<210> 203
 <211> 164
 <212> PRT
 <213> Homo sapien

<400> 203
 Met Arg Leu Ala Val Gly Ala Leu Leu Val Cys Ala Val Leu Gly Leu
 1 5 10 15
 Cys Leu Ala Val Pro Asp Lys Thr Val Arg Trp Cys Ala Val Ser Glu
 20 25 30
 His Glu Ala Thr Lys Cys Gln Ser Phe Arg Asp His Met Lys Ser Val
 35 40 45
 Ile Pro Ser Asp Gly Pro Ser Val Ala Cys Val Lys Lys Ala Ser Tyr
 50 55 60
 Leu Asp Cys Ile Arg Ala Ile Ala Ala Asn Glu Ala Asp Ala Val Thr
 65 70 75 80
 Leu Asp Ala Gly Leu Val Tyr Asp Ala Tyr Leu Ala Pro Asn Asn Leu
 85 90 95
 Lys Pro Val Val Ala Glu Phe Tyr Gly Ser Lys Glu Asp Pro Gln Thr

Phe Tyr Tyr Ala Val Ala Val Val Lys Lys Asp Ser Gly Phe Gln Met
 100 115 120 125
 Asn Gln Leu Arg Gly Lys Lys Ser Cys His Thr Gly Leu Gly Arg Ser
 130 135 140
 Ala Gly Trp Asn Ile Pro Ile Gly Leu Leu Tyr Cys Asp Leu Pro Glu
 145 150 155 160
 Pro Arg Lys Pro

<210> 204
 <211> 241
 <212> PRT
 <213> Homo sapien

<400> 204
 Met Ser Gly Glu Ser Ala Arg Ser Leu Gly Lys Gly Ser Ala Pro Pro
 1 5 10 15
 Gly Pro Val Pro Glu Gly Ser Ile Arg Ile Tyr Ser Met Arg Phe Cys
 20 25 30
 Pro Phe Ala Glu Arg Thr Arg Leu Val Leu Lys Ala Lys Gly Ile Arg
 35 40 45
 His Glu Val Ile Asn Ile Asn Leu Lys Asn Lys Pro Glu Trp Phe Phe
 50 55 60
 Lys Lys Asn Pro Phe Gly Leu Val Pro Val Leu Glu Asn Ser Gln Gly
 65 70 75 80
 Gln Leu Ile Tyr Glu Ser Ala Ile Thr Cys Glu Tyr Leu Asp Glu Ala
 85 90 95
 Tyr Pro Gly Lys Lys Leu Leu Pro Asp Asp Pro Tyr Glu Lys Ala Cys
 100 105 110
 Gln Lys Met Ile Leu Glu Leu Phe Ser Lys Val Pro Ser Leu Val Gly
 115 120 125
 Ser Phe Ile Arg Ser Gln Asn Lys Glu Asp Tyr Asp Gly Leu Lys Glu
 130 135 140
 Glu Phe Arg Lys Glu Phe Thr Lys Leu Glu Glu Val Leu Thr Asn Lys
 145 150 155 160
 Lys Thr Thr Phe Phe Gly Gly Asn Ser Ile Ser Met Ile Asp Tyr Leu
 165 170 175
 Ile Trp Pro Trp Phe Glu Arg Leu Glu Ala Met Lys Leu Asn Glu Cys
 180 185 190
 Val Asp His Thr Pro Lys Leu Lys Leu Trp Met Ala Ala Met Lys Glu
 195 200 205
 Asp Pro Thr Val Ser Ala Leu Leu Thr Ser Glu Lys Asp Trp Gln Gly
 210 215 220
 Phe Leu Glu Leu Tyr Leu Gln Asn Ser Pro Glu Ala Cys Asp Tyr Gly
 225 230 235 240
 Leu

<210> 205
 <211> 160
 <212> PRT
 <213> Homo sapien

<400> 205
 Met Gln Ile Phe Val Lys Thr Leu Thr Gly Lys Thr Ile Thr Leu Glu
 1 5 10 15
 Val Glu Pro Ser Asp Thr Ile Glu Asn Val Lys Ala Lys Ile Gln Asp
 20 25 30
 Lys Glu Gly Ile Pro Pro Asp Gln Gln Arg Leu Ile Phe Ala Gly Lys
 35 40 45
 Gln Leu Glu Asp Gly Arg Thr Leu Ser Asp Tyr Asn Ile Gln Lys Glu
 50 55 60
 Ser Thr Leu His Leu Val Leu Arg Leu Arg Gly Gly Met Gln Ile Phe
 65 70 75 80
 Val Lys Thr Leu Thr Gly Lys Thr Ile Thr Leu Glu Val Glu Pro Ser
 85 90 95
 Asp Thr Ile Glu Asn Val Lys Ala Lys Ile Gln Asp Lys Glu Gly Ile
 100 105 110
 Pro Pro Asp Gln Gln Arg Leu Ile Phe Ala Gly Lys Gln Leu Glu Asp
 115 120 125
 Gly Arg Thr Leu Ser Asp Tyr Asn Ile Gln Lys Glu Ser Thr Leu His
 130 135 140
 Leu Val Leu Arg Leu Arg Gly Gly Met Gln Ile Phe Val Lys Thr Leu
 145 150 155 160

<210> 206
 <211> 197
 <212> PRT
 <213> Homo sapien

<400> 206
 Thr Ser Pro Ser Glu Ala Cys Ala Pro Leu Leu Ile Ser Leu Ser Thr
 1 5 10 15
 Leu Ile Tyr Asn Gly Ala Leu Pro Cys Gln Cys Asn Pro Gln Gly Ser
 20 25 30
 Leu Ser Ser Glu Cys Asn Pro His Gly Gly Gln Cys Leu Cys Lys Pro
 35 40 45
 Gly Val Val Gly Arg Arg Cys Asp Leu Cys Ala Pro Gly Tyr Tyr Gly
 50 55 60
 Phe Gly Pro Thr Gly Cys Gln Gly Ala Cys Leu Gly Cys Arg Asp His
 65 70 75 80
 Thr Gly Gly Glu His Cys Glu Arg Cys Ile Ala Gly Phe His Gly Asp
 85 90 95
 Pro Arg Leu Pro Tyr Gly Gly Gln Cys Arg Pro Cys Pro Cys Pro Glu
 100 105 110
 Gly Pro Gly Ser Gln Arg His Phe Ala Thr Ser Cys His Gln Asp Glu
 115 120 125
 Tyr Ser Gln Gln Ile Val Cys His Cys Arg Ala Gly Tyr Thr Gly Leu
 130 135 140
 Arg Cys Glu Ala Cys Ala Pro Gly His Phe Gly Asp Pro Ser Arg Pro
 145 150 155 160
 Gly Gly Arg Cys Gln Leu Cys Glu Cys Ser Gly Asn Ile Asp Pro Met
 165 170 175
 Asp Pro Asp Ala Cys Asp Pro His Thr Gly Gln Cys Leu Arg Cys Leu
 180 185 190
 His His Thr Glu Gly
 195

<210> 207
 <211> 175
 <212> PRT
 <213> Homo sapien

<400> 207
 Ile Ile Arg Gln Gln Gly Leu Ala Ser Tyr Asp Tyr Val Arg Arg Arg
 1 5 10 15
 Leu Thr Ala Glu Asp Leu Phe Glu Ala Arg Ile Ile Ser Leu Glu Thr
 20 25 30
 Tyr Asn Leu Leu Arg Glu Gly Thr Arg Ser Leu Arg Glu Ala Leu Glu
 35 40 45
 Ala Glu Ser Ala Trp Cys Tyr Leu Tyr Gly Thr Gly Ser Val Ala Gly
 50 55 60
 Val Tyr Leu Pro Gly Ser Arg Gln Thr Leu Ser Ile Tyr Gln Ala Leu
 65 70 75 80
 Lys Lys Gly Leu Leu Ser Ala Glu Val Ala Arg Leu Leu Leu Glu Ala
 85 90 95
 Gln Ala Ala Thr Gly Phe Leu Leu Asp Pro Val Lys Gly Glu Arg Leu
 100 105 110
 Thr Val Asp Glu Ala Val Arg Lys Gly Leu Val Gly Pro Glu Leu His
 115 120 125
 Asp Arg Leu Leu Ser Ala Glu Arg Ala Val Thr Gly Tyr Arg Asp Pro
 130 135 140
 Tyr Thr Glu Gln Thr Ile Ser Leu Phe Gln Ala Met Lys Lys Glu Leu
 145 150 155 160
 Ile Pro Thr Glu Glu Ala Leu Arg Leu Trp Met Pro Ser Trp Pro
 165 170 175

<210> 208
 <211> 177
 <212> PRT
 <213> Homo sapien

<400> 208
 Met Ala Ala Gly Val Glu Ala Ala Ala Glu Val Ala Ala Thr Glu Ile
 1 5 10 15
 Lys Met Glu Glu Glu Ser Gly Ala Pro Gly Val Pro Ser Gly Asn Gly
 20 25 30
 Ala Pro Gly Pro Lys Gly Glu Gly Glu Arg Pro Ala Gln Asn Glu Lys
 35 40 45
 Arg Lys Glu Lys Asn Ile Lys Arg Gly Gly Asn Arg Phe Glu Pro Tyr
 50 55 60
 Ala Asn Pro Thr Lys Arg Tyr Arg Ala Phe Ile Thr Asn Ile Pro Phe
 65 70 75 80
 Asp Val Lys Trp Gln Ser Leu Lys Asp Leu Val Lys Glu Lys Val Gly
 85 90 95
 Glu Val Thr Tyr Val Glu Leu Leu Met Asp Ala Glu Gly Lys Ser Arg
 100 105 110
 Gly Cys Ala Val Val Glu Phe Lys Met Glu Glu Ser Met Lys Lys Ala
 115 120 125
 Ala Glu Val Leu Asn Lys His Ser Leu Ser Gly Arg Pro Leu Lys Val
 130 135 140

Lys Glu Asp Pro Asp Gly Glu His Ala Arg Arg Ala Met Gln Lys Val
 145 150 155 160
 Met Ala Thr Thr Gly Gly Met Gly Met Gly Pro Gly Gly Pro Gly Met
 165 170 175
 Ile

<210> 209
 <211> 196
 <212> PRT
 <213> Homo sapien

<400> 209
 Asp Leu Gln Asp Met Phe Ile Val His Thr Ile Glu Glu Ile Glu Gly
 1 5 10 15
 Leu Ile Ser Ala His Asp Gln Phe Lys Ser Thr Leu Pro Asp Ala Asp
 20 25 30
 Arg Glu Arg Glu Ala Ile Leu Ala Ile His Lys Glu Ala Gln Arg Ile
 35 40 45
 Ala Glu Ser Asn His Ile Lys Leu Ser Gly Ser Asn Pro Tyr Thr Thr
 50 55 60
 Val Thr Pro Gln Ile Ile Asn Ser Lys Trp Glu Lys Val Gln Gln Leu
 65 70 75 80
 Val Pro Lys Arg Asp His Ala Leu Leu Glu Glu Gln Ser Lys Gln Gln
 85 90 95
 Ser Asn Glu His Leu Arg Arg Gln Phe Ala Ser Gln Ala Asn Val Val
 100 105 110
 Gly Pro Trp Ile Gln Thr Lys Met Glu Glu Ile Gly Arg Ile Ser Ile
 115 120 125
 Glu Met Asn Gly Thr Leu Glu Asp Gln Leu Ser His Leu Lys Gln Tyr
 130 135 140
 Glu Arg Ser Ile Val Asp Tyr Lys Pro Asn Leu Asp Leu Leu Glu Gln
 145 150 155 160
 Gln His Gln Leu Ile Gln Glu Ala Leu Ile Phe Asp Asn Lys His Thr
 165 170 175
 Asn Tyr Thr Met Glu His Ile Arg Val Gly Trp Glu Gln Leu Leu Thr
 180 185 190
 Thr Ile Ala Arg
 195

<210> 210
 <211> 156
 <212> PRT
 <213> Homo sapien

<400> 210
 Lys Leu Thr Ile Glu Ser Thr Pro Phe Asn Val Ala Glu Gly Lys Glu
 1 5 10 15
 Val Leu Leu Leu Ala His Asn Leu Pro Gln Asn Arg Ile Gly Tyr Ser
 20 25 30
 Trp Tyr Lys Gly Glu Arg Val Asp Gly Asn Ser Leu Ile Val Gly Tyr
 35 40 45
 Val Ile Gly Thr Gln Gln Ala Thr Pro Gly Pro Ala Tyr Ser Gly Arg
 50 55 60

Glu Thr Ile Tyr Pro Asn Ala Ser Leu Leu Ile Gln Asn Val Thr Gln
 65 70 75 80
 Asn Asp Thr Gly Phe Tyr Thr Leu Gln Val Ile Lys Ser Asp Leu Val
 85 90 95
 Asn Glu Glu Ala Thr Gly Gln Phe His Val Tyr Pro Glu Leu Pro Lys
 100 105 110
 Pro Ser Ile Ser Ser Asn Asn Ser Asn Pro Val Glu Asp Lys Asp Ala
 115 120 125
 Val Ala Phe Thr Cys Glu Pro Glu Val Gln Asn Thr Thr Tyr Leu Trp
 130 135 140
 Trp Val Asn Gly Gln Ser Leu Pro Val Ser Pro Lys
 145 150 155

<210> 211
 <211> 92
 <212> PRT
 <213> Homo sapien

<400> 211
 Met Glu Ser Pro Ser Ala Pro Pro His Arg Trp Cys Ile Pro Trp Gln
 1 5 10 15
 Arg Leu Leu Leu Thr Ala Ser Leu Leu Thr Phe Trp Asn Pro Pro Thr
 20 25 30
 Thr Ala Lys Leu Thr Ile Glu Ser Thr Pro Phe Asn Val Ala Glu Gly
 35 40 45
 Lys Glu Val Leu Leu Leu Val His Asn Leu Pro Gln His Leu Phe Gly
 50 55 60
 Tyr Ser Trp Tyr Lys Gly Glu Arg Val Asp Gly Asn Arg Gln Ile Ile
 65 70 75 80
 Gly Tyr Val Ile Gly Thr Gln Gln Ala Thr Pro Gly
 85 90

<210> 212
 <211> 142
 <212> PRT
 <213> Homo sapien

<400> 212
 Glu Lys Gln Lys Asn Lys Glu Phe Ser Gln Thr Leu Glu Asn Glu Lys
 1 5 10 15
 Asn Thr Leu Leu Ser Gln Ile Ser Thr Lys Asp Gly Glu Leu Lys Met
 20 25 30
 Leu Gln Glu Glu Val Thr Lys Met Asn Leu Leu Asn Gln Gln Ile Gln
 35 40 45
 Glu Glu Leu Ser Arg Val Thr Lys Leu Lys Glu Thr Ala Glu Glu Glu
 50 55 60
 Lys Asp Asp Leu Glu Glu Arg Leu Met Asn Gln Leu Ala Glu Leu Asn
 65 70 75 80
 Gly Ser Ile Gly Asn Tyr Cys Gln Asp Val Thr Asp Ala Gln Ile Lys
 85 90 95
 Asn Glu Leu Leu Glu Ser Glu Met Lys Asn Leu Lys Lys Cys Val Ser
 100 105 110
 Glu Leu Glu Glu Glu Lys Gln Gln Leu Val Lys Glu Lys Thr Lys Val
 115 120 125

Glu Ser Glu Ile Arg Lys Glu Tyr Leu Glu Lys Ile Gln Gly
130 135 140

<210> 213
<211> 142
<212> PRT
<213> Homo sapien

<400> 213
Gly Gly Tyr Gly Gly Gly Tyr Gly Gly Val Leu Thr Ala Ser Asp Gly
1 5 10 15
Leu Leu Ala Gly Asn Glu Lys Leu Thr Met Gln Asn Leu Asn Asp Arg
20 25 30
Leu Ala Ser Tyr Leu Asp Lys Val Arg Ala Leu Glu Ala Ala Asn Gly
35 40 45
Glu Leu Glu Val Lys Ile Arg Asp Trp Tyr Gln Lys Gln Gly Pro Gly
50 55 60
Pro Ser Arg Asp Tyr Ser His Tyr Tyr Thr Thr Ile Gln Asp Leu Arg
65 70 75 80
Asp Lys Ile Leu Gly Ala Thr Ile Glu Asn Ser Arg Ile Val Leu Gln
85 90 95
Ile Asp Asn Ala Arg Leu Ala Ala Asp Asp Phe Arg Thr Lys Phe Glu
100 105 110
Thr Glu Gln Ala Leu Arg Met Ser Val Glu Ala Asp Ile Asn Gly Leu
115 120 125
Arg Arg Val Leu Asp Glu Leu Thr Leu Ala Arg Thr Asp Leu
130 135 140

<210> 214
<211> 129
<212> PRT
<213> Homo sapien

<400> 214
Val Met Arg Val Asp Phe Asn Val Pro Met Lys Asn Asn Gln Ile Thr
1 5 10 15
Asn Asn Gln Arg Ile Lys Ala Ala Val Pro Ser Ile Lys Phe Cys Leu
20 25 30
Asp Asn Gly Ala Lys Ser Val Val Leu Met Ser His Leu Gly Arg Pro
35 40 45
Asp Gly Val Pro Met Pro Asp Lys Tyr Ser Leu Glu Pro Val Ala Val
50 55 60
Glu Leu Arg Ser Leu Leu Gly Lys Asp Val Leu Phe Leu Lys Asp Cys
65 70 75 80
Val Gly Pro Glu Val Glu Lys Ala Cys Ala Asn Pro Ala Ala Gly Ser
85 90 95
Val Ile Leu Leu Glu Asn Leu Arg Phe His Val Glu Glu Glu Gly Lys
100 105 110
Gly Lys Asp Ala Ser Gly Asn Lys Val Lys Ala Glu Pro Ala Lys Ile
115 120 125
Glu

<210> 215

<211> 148
 <212> PRT
 <213> Homo sapien

<400> 215
 Met Ala Thr Leu Lys Glu Lys Leu Ile Ala Pro Val Ala Glu Glu Glu
 1 5 10 15
 Ala Thr Val Pro Asn Asn Lys Ile Thr Val Val Gly Val Gly Gln Val
 20 25 30
 Gly Met Ala Cys Ala Ile Ser Ile Leu Gly Lys Ser Leu Ala Asp Glu
 35 40 45
 Leu Ala Leu Val Asp Val Leu Glu Asp Lys Leu Lys Gly Glu Met Met
 50 55 60
 Asp Leu Gln His Gly Ser Leu Phe Leu Gln Thr Pro Lys Ile Val Ala
 65 70 75 80
 Asp Lys Asp Tyr Ser Val Thr Ala Asn Ser Lys Ile Val Val Val Thr
 85 90 95
 Ala Gly Val Arg Gln Gln Glu Gly Glu Ser Arg Leu Asn Leu Val Gln
 100 105 110
 Arg Asn Val Asn Val Phe Lys Phe Ile Ile Pro Gln Ile Val Lys Tyr
 115 120 125
 Ser Pro Asp Cys Ile Ile Ile Val Val Ser Asn Pro Val Asp Ile Leu
 130 135 140
 Thr Tyr Val Thr
 145

<210> 216
 <211> 527
 <212> PRT
 <213> Homo sapien

<400> 216
 Gln Arg Ala Pro Gly Ile Glu Glu Lys Ala Ala Glu Asn Gly Ala Leu
 1 5 10 15
 Gly Ser Pro Glu Arg Glu Glu Lys Val Leu Glu Asn Gly Glu Leu Thr
 20 25 30
 Pro Pro Arg Arg Glu Glu Lys Ala Leu Glu Asn Gly Glu Leu Arg Ser
 35 40 45
 Pro Glu Ala Gly Glu Lys Val Leu Val Asn Gly Gly Leu Thr Pro Pro
 50 55 60
 Lys Ser Glu Asp Lys Val Ser Glu Asn Gly Gly Leu Arg Phe Pro Arg
 65 70 75 80
 Asn Thr Glu Arg Pro Pro Glu Thr Gly Pro Trp Arg Ala Pro Gly Pro
 85 90 95
 Trp Glu Lys Thr Pro Glu Ser Trp Gly Pro Ala Pro Thr Ile Gly Glu
 100 105 110
 Pro Ala Pro Glu Thr Ser Leu Glu Arg Ala Pro Ala Pro Ser Ala Val
 115 120 125
 Val Ser Ser Arg Asn Gly Gly Glu Thr Ala Pro Gly Pro Leu Gly Pro
 130 135 140
 Ala Pro Lys Asn Gly Thr Leu Glu Pro Gly Thr Glu Arg Arg Ala Pro
 145 150 155 160
 Glu Thr Gly Gly Ala Pro Arg Ala Pro Gly Ala Gly Arg Leu Asp Leu
 165 170 175

Gly Ser Gly Gly Arg Ala Pro Val Gly Thr Gly Thr Ala Pro Gly Gly
 180 185 190
 Gly Pro Gly Ser Gly Val Asp Ala Lys Ala Gly Trp Val Asp Asn Thr
 195 200 205
 Arg Pro Gln Pro Pro Pro Pro Leu Pro Pro Pro Glu Ala Gln
 210 215 220
 Pro Arg Arg Leu Glu Pro Ala Pro Pro Arg Ala Arg Pro Glu Val Ala
 225 230 235 240
 Pro Glu Gly Glu Pro Gly Ala Pro Asp Ser Arg Ala Gly Gly Asp Thr
 245 250 255
 Ala Leu Ser Gly Asp Gly Asp Pro Pro Lys Pro Glu Arg Lys Gly Pro
 260 265 270
 Glu Met Pro Arg Leu Phe Leu Asp Leu Gly Pro Pro Gln Gly Asn Ser
 275 280 285
 Glu Gln Ile Lys Ala Arg Leu Ser Arg Leu Ser Leu Ala Leu Pro Pro
 290 295 300
 Leu Thr Leu Thr Pro Phe Pro Gly Pro Gly Pro Arg Arg Pro Pro Trp
 305 310 315 320
 Glu Gly Ala Asp Ala Gly Ala Ala Gly Gly Glu Ala Gly Gly Ala Gly
 325 330 335
 Ala Pro Gly Pro Ala Glu Glu Asp Gly Glu Asp Glu Asp Glu Asp Glu
 340 345 350
 Glu Glu Asp Glu Glu Ala Ala Ala Pro Gly Ala Ala Ala Gly Pro Arg
 355 360 365
 Gly Pro Gly Arg Ala Arg Ala Ala Pro Val Pro Val Val Val Ser Ser
 370 375 380
 Ala Asp Ala Asp Ala Ala Arg Pro Leu Arg Gly Leu Leu Lys Ser Pro
 385 390 395 400
 Arg Gly Ala Asp Glu Pro Glu Asp Ser Glu Leu Glu Arg Lys Arg Lys
 405 410 415
 Met Val Ser Phe His Gly Asp Val Thr Val Tyr Leu Phe Asp Gln Glu
 420 425 430
 Thr Pro Thr Asn Glu Leu Ser Val Gln Ala Pro Pro Glu Gly Asp Thr
 435 440 445
 Asp Pro Ser Thr Pro Pro Ala Pro Pro Thr Pro Pro His Pro Ala Thr
 450 455 460
 Pro Gly Asp Gly Phe Pro Ser Asn Asp Ser Gly Phe Gly Gly Ser Phe
 465 470 475 480
 Glu Trp Ala Glu Asp Phe Pro Leu Leu Pro Pro Pro Gly Pro Pro Leu
 485 490 495
 Cys Phe Ser Arg Phe Ser Val Ser Pro Ala Leu Glu Thr Pro Gly Pro
 500 505 510
 Pro Ala Arg Ala Pro Asp Ala Arg Pro Ala Gly Pro Val Glu Asn
 515 520 525

<210> 217

<211> 466

<212> DNA

<213> Homo sapien

<400> 217

gaatgggtgcc tgtcctgctg tctctgctgc tggcttctggg tctctgctgtc cccaggaga 60
 accaagatgg tcgttactct ctgacctata tctacactgg gctgtccaag catgttgaag 120
 acgtccccgc gtttcaggcc cttggctcac tcaatgacct ccagttcttt agatacaaca 180

```
<210> 218
<211> 381
<212> DNA
<213> Homo sapien
```

```
<210> 219
<211> 1293
<212> DNA
<213> Homo sapien
```

```
<210> 220
<211> 983
<212> DNA
<213> Homo sapien
```

<400> 220
 cagggttattc tgatcctgcc gectgtcttc cctgtaagag tggagcctcg aggtgtacct 60
 taaagtgacc ggaatgttag agatgcaatt tgcagagctg gggcaaggaa gggctccttg 120
 tcaactgtagt tactttcctt gcagtgccca aatgcccaat aagaaggaa acatgaccac 180
 tgctgtgggg agtcagcagg tgcgtgatgc agctggccac actccatcca cggccatgac 240
 ataaaacaga caagaagtaa ggctggactg taacacctca aggcctgctc cagtgaccca 300
 ctttcttcag agaggctcta ccacacacac aaccaccttc ctaatttaca ctcagatcac 360
 tacaccatgt ctcccaagtt aaaacatgta tccacctaga ctttaaagt gctttgtaac 420
 tgttgatggc actgtacaga gggccaaagt atttcccatc agatagcatt tttctgaacc 480
 catgcctctt gggacgagat cacaggactt gacctcatc caaataggac caggtgacct 540
 acagagacat cacaatgatg gcttctaca gtcaagtcca tttccaataa tgctctcatc 600
 taagagaacc catgaacctt atttgaatcc tgggtcaaac aaaaacctta aattatttat 660
 gagacaatta taaacttgat agattttgat gtgtgaagg ttttatgaat atttttagtc 720
 agtgatggta tactgttaag gaaaagggtc atatttttag gacaaaggct gaaacattta 780
 tggacagagt gatatgatct ctgggatttg ttttaggatg aagtgggagg gaggaatga 840
 atggaaatag tgttgaaaca gtattggcca cgagtcagct attgtgtgct aagacgctcc 900
 tcacaccagt ctactctgta tgtgtttgaa tatctctgta ataaacttaa caaggaaaaa 960
 aaaaaaaaaa aaaaaaactc gag 983

<210> 221
 <211> 373
 <212> DNA
 <213> Homo sapien

<400> 221
 cattttatgg gttattttt tattaaatag caataagata cttttataac tcaataaaat 60
 tattcaatga tacattcgga aaataaatgt ataaaatag aaaaagtact aaaaagcatt 120
 tttcagtact tttaggttag attaatccaa ctaaacacta gcatatgtta tacagtaata 180
 ataaggggaa aatacaataa tgttgagaaa gcaaactcaa agcatagatc aatgaaaaaa 240
 ttgagaaatg gacataaatg atttagtatt tttaaagaga gtgaaaaatc attattttat 300
 gcttttgtgt agcgttagat gaattaaata acatatgcac atatagcttt gcgatacaaa 360
 tttccagacc ata 373

<210> 222
 <211> 544
 <212> DNA
 <213> Homo sapien

<400> 222
 cagagatgct gctgctacaa aggatcgggtg taagcagtta acccaggaaa tgatgacaga 60
 gaaagaaaga agcaatgtgg ttataacaag gatgaaagat cgaattggaa cattagaaaa 120
 ggaacataat gtatttcaaa acaaaatata tgctcagttat caagagactc aacagatgca 180
 gatgaagttt cagcaagttc gtgagcagat ggaggcagag atagctcact tgaagcagga 240
 aatgggtata ctgagagatg cagtcagcaa cactacaaat caactggaaa gcaagcagtc 300
 tgcagaacta aataaactac gccaggatta tgctaggttg gtgaatgagc tgactgagaa 360
 aacaggaaaag ctacagcaag aggaagtcca aaagaagaat gctgagcaag cagctactca 420
 gttgaagggt caactacaag aagctgagag aaggtgggaa gaagttcaga gctacatcag 480
 gaagagaaca gcggaacatg aggcagcaca gctagattta cagagtaaat ttgtggccaa 540
 agaa 544

<210> 223
 <211> 316
 <212> DNA
 <213> Homo sapien

<400> 223
 gaggaaggg atatgcttta gtgcctatta tagttaattc ttcaactcca aagtctaaaa 60
 cagttgaatc tgctgaagga aaatctgaag aagtaaataa aacattagtt ataccactg 120
 aggaagcaga aatggaagaa agtggacgaa gtgcaactcc tgtaactgt gaacagcctg 180
 atatcttggt ttcttctaca ccaataaatg aaggacagac tgtgtagac aaggtggctg 240
 agcagtgtga acctgctgaa agtcagccag aagcacttct gagaggaaga tgtttgcaag 300
 gtaactctaa cagttg 316

<210> 224
 <211> 1583
 <212> DNA
 <213> Homo sapien

<400> 224
 cagaccacgt ctgccctcgc cgtcttagcc ctgcgcccc a gcccggccgc ggcacctccg 60
 cctgcgccgc gctaggtcgg ccggctccgc ccggctgcc cctaggatga atatcatgga 120
 cttcaacgtg aagaagctgg cggccgacgc aggcaccttc ctgagtcgcg ccgtgcagtt 180
 cacagaagaa agccttgccc aggtgagaa gacagaattg gatgctcact tagagaacct 240
 ccttagcaaa gctgaatgta ccaaaatatg gacagaaaaa ataataaaac aaactgaagt 300
 gttattgcag ccaaatccaa atgccaggat agaagaattt gtttatgaga aactggatag 360
 aaaagctcca agtcgtataa acaaccaga acttttgga caatatatga ttgatgcagg 420
 gactgagttt ggcccaggaa cagcttatgg taatgccctt attaaatgtg gagaaaccca 480
 aaaaagaatt ggaacagcag acagagaact gattcaaacg tcagccttaa attttcttac 540
 tcctttaaga aactttatag aaggagatta caaaacaatt gctaaagaaa ggaaactatt 600
 gcaaaataag agactggatt tggatgctgc aaaaacgaga ctaaaaaagg caaaagctgc 660
 agaaactaga aattcatctg aacaggaatt aagaataact caaagtgaat ttgatcgta 720
 agcagagatt accagacttc tgctagaggg aatcagcagt acacatgccc atcaccttcg 780
 ctgtctgaat gactttgtag aagcccagat gacttactat gcacagtgtt accagtatat 840
 gttggacctc cagaaacaac tgggaagttt tccatccaat tatcttagta acaacaatca 900
 gacttctgtg acacctgtac catcagtttt accaaatgcg attggttctt ctgccatggc 960
 ttcaacaagt ggcctagtaa tcacctctcc ttccaacctc agtgacctta aggagtgtag 1020
 tggcagcaga aaggccaggg ttctctatga ttatgatgca gcaaacagta ctgaattatc 1080
 acttctggca gatgaggtga tcaactgtgt cagtgttgtt ggaatggatt cagactggct 1140
 aatgggggaa aggggaaacc agaagggcaa ggtgccatt acctacttag aactgctcaa 1200
 ttaagtaggt ggactatgga aaggttgccc atcatgactt tgtatttata tacaattaac 1260
 tctaataaaa gcagggttaag tatcttccat gttaatgtgt taagagactg aaaataccag 1320
 ccatcagaaa ctggcctttt tgccaataaa gttgcatggt aaatatttca ttacagaatt 1380
 tatgttagag ctttcatgcc aagaatgttt tcttcaaaaa ttctcttttt attgaggttt 1440
 cactaataag cagcttctac ttttgagcct caacttaaaag cagaactgtt ttttactgga 1500
 ttttctatta acagcaagct ttttttttta tgtaaaataa atctattgtg aattgaaaaa 1560
 aaaaaaaaaa aaaaaaactc gag 1583

<210> 225
 <211> 491
 <212> DNA
 <213> Homo sapien

<400> 225
 gaacaacatc atcttgaatc actagataga ctcttgacgg aaagcaaagg ggaaatgaaa 60
 aaggaaaata tgaagaaaga tgaagcttta aaagcattac agaaccaagt atctgaagaa 120
 acaatcaagg ttaggcaact agattcagca ttggaaattt gtaaggaaga acttgtcttg 180
 catttgaatc aattggaagg aaataaggaa aagtttgaaa aacagttaaa gaagaaatct 240
 gaagaggtat attgtttaca gaaagagcta aagataaaaa atcacagtct tcaagagact 300

tctgagcaaa	acgttattct	acagcatact	cttcagcaac	agcagcaaat	gttacaacaa	360
gagacaatta	gaaatggaga	gctagaagat	actcaaacta	aacttgaaaa	acaggtgtca	420
aaactggaac	aagaacttca	aaaacaaagg	gaaagttcag	ctgaaaagtt	gagaaaaatg	480
gaggagaaat	g					491

<210> 226
 <211> 483
 <212> DNA
 <213> Homo sapien

<400> 226						60
cagccgcacg	ccgcggagca	ggggctcgga	gggtcccggga	ttacgggtgct	cgagcacgct	120
ggtgggaaag	gacccgggac	ttgaacagt	ttgtgcggcg	ccatgcagg	ctccagcctc	180
aatgaggtga	agatttacag	cctcagctgc	ggcaagtccc	ttcctgagt	gctttctgat	240
aggaagaaga	gagcgctaca	gaagaaagat	gtagatgtcc	gtaggagaat	tgaacttatt	300
caggactttg	aaatgcctac	tgtgtgtacc	actattaagg	tgtcaaaaaga	tggacagtac	360
atthtagcaa	ctggaacata	taaacctcgg	gttcgatgtt	atgacaccta	tcaattatcc	420
ttgaagtgtg	aaaggtgttt	agattcagaa	gttgtcacct	ttgaaattht	gtctgatgac	480
tactcaaaga	ttgtcttctt	acataatgat	agatacattg	aatttcattc	gcaatcagg	483
ttt						

<210> 227
 <211> 486
 <212> DNA
 <213> Homo sapien

<400> 227						60
gagcctcgct	aagctccgac	tctggggcggc	accggggcgtc	ccacgatgcc	gaagaacaag	120
aagcggaaac	ctccccaccg	cggtagcagt	gctggcgcg	gcgggtcagg	agcagccgca	180
gcgacggcgg	cgacagcagg	tggccagcat	cgaaatgttc	agccttttag	tgatgaagat	240
gcatcaattg	aaacagttag	ccattgcagt	ggttatagcg	atccttccag	ttttgctgaa	300
gatggaccag	aagtccttga	tgaggaaagg	actcaagaag	acctagagta	caagttgaag	360
ggattaattg	acctaaccct	ggataagagt	gcgaagacaa	ggcaagcagc	tcttgaaggt	420
attaaaaatg	cactggcttc	aaaaatgctg	tatgaattta	ttctggaaag	gagaatgact	480
ttaactgata	gcattgaacg	ctgcctgaaa	aaaggtaaga	gtgatgagca	acgtgcagct	486
gcagcg						

<210> 228
 <211> 494
 <212> DNA
 <213> Homo sapien

<400> 228						60
gaggccagga	ctccgggaat	gcgagcaggc	cccttattct	cccagtgcc	tcggtctgtc	120
cccacagcgg	cccggtcagg	gttgcccag	ccccaaaggc	ggggcgcca	ccgggtgtct	180
gaaagggaca	gaatgctttg	acctccaagc	tgthtttaaat	ctagtagata	agccagatcc	240
tgtgttgcca	taagcccttg	gccacattt	aagtgggaat	gcagctagct	tggtgtctg	300
aaactttgta	agcgcttct	gtctgaatcc	tgaacacagg	caccaagact	actgaagaag	360
ctcgtcattc	ttgtgcagg	atagccacac	aagcaaact	gtttgcaaaa	cttgaaagaa	420
agaaaattgc	agaaagaaga	cttgctgttc	ttaagaggcc	caggaaggtg	ctacttagga	480
atcccaccgg	cttgtgaagc	aagggaatca	agtttgccct	caatggggaa	cttgacttca	494
ggaaaatgaa	cttt					

<210> 229

<211> 465
 <212> DNA
 <213> Homo sapien

<400> 229
 gtcagagagc tggataaacc tcctgttggg catgcagaac cgactcaata aggtcatcaa 60
 aagcgtgggc aagattgagc actccttctg gagatccttt cactactgagc gaaagacaga 120
 accagccaca ggcttcatcg atgggtgatct gattgaaagt ttcttagata tcagccgccc 180
 taagatgcag gaggttgtgg caaacttgca gtatgatgat ggcagtggta tgaagcggga 240
 ggcaactgca gatgacctca tcaaagtcgt ggaggaaacta actcggtatcc attagccaag 300
 gacaggatct cttttcctga ccctcctaaa ggcgttgccc tcctatcctc ctttccttgc 360
 ccacccttgg tttctttggc atgggaaggt tttccttaac cacttgccct agagccacca 420
 gtgaccttgt gtggaaacag ggtttttttt acttaaaaca gttca 465

<210> 230
 <211> 495
 <212> DNA
 <213> Homo sapien

<400> 230
 caggggaaaag ggtgtttggc cttgaccagc cactgctgac ctcaatctca gacctacaga 60
 tgggtgaatat ctccctgcga gtgttgtctc gacccaatgc tcaggagctt cctagcatgt 120
 accagcgcct agggctggac tacgaggaac gagtgttgcc gtccattgtc aacgaggtgc 180
 tcaagagtgt ggtggccaag ttcaatgcct cacagctgat caccagcgg gccagggtat 240
 ccctgttgat ccgcccggag ctgacagaaa gggccaaagg acttcagcct catcctggat 300
 gatgtggcca tcacagactt gagcttttagc cgagaagtac acaagctgcc tgtaagaaac 360
 ccaaccaagt ggggtgaatt ccaaaaaccc gtgggggtga agggcttctt aagaatgcaa 420
 ggaaggagga aaagaattcc atgggggggg ggttccttaa cccaggaaca ggggtttccc 480
 ttgaattttt ttcca 495

<210> 231
 <211> 498
 <212> DNA
 <213> Homo sapien

<400> 231
 ggcagcttct gagaccaggg ttgctccgtc cgtgctccgc ctccgcatga cttcctacag 60
 ctatcgccag tcgtcggcca cgctgcctt cggaggcctg ggccggcgct ccgtgcgttt 120
 tgggcccggg gtcgtttttc gcgcgccag cattcacggg ggctccggcg gccgcggcgt 180
 atccgtgtcc tccgcccgtt ttgtgtcctc gtccctctcg gggggctacg gcggcggtca 240
 cggcggcgtc ctgaccgcgt ccgacgggct gctggcgggc aacgagaagc taaccatgca 300
 gaacctcaac gaccgcctgc ctccctacctg gacaaagtgc gcgccctgga agcgggcaac 360
 ggcgaaactta gaggtgaaag aatcccgcga actggtacca aaaacaaggg gcctggggcc 420
 ttccgcgact tacagccaac ttactacacc gaacattcaa gaacttgcgg gaacaaaaat 480
 ttttgggtgcc acccattt 498

<210> 232
 <211> 465
 <212> DNA
 <213> Homo sapien

<400> 232
 caggccggcc gagtaggaaa gctggaggcg cgggtgggga acatgtctga gtcggagctc 60
 ggcaggaagt gggaccgggtg tctggcggat gcggctgtga agataggtac tggttttgga 120

ttaggaattg	ttttctcact	tacotttcttt	aaaagaagaa	tgtggccatt	agccttcggt	180
tctggcatgg	gattaggaat	ggcttattcc	aactgtcagc	atgatttcca	ggctccatat	240
cttctacatg	gaaaatatgt	caaagagcag	gagcagtgc	ttcacctgag	aacatcccag	300
cgggaggaca	agagaaaatc	atgtttattc	ctcaggaata	cttgaagtgc	cctggagtaa	360
actgccattc	ttctgtaaca	atggtatcag	taatgcttta	aactccagca	cctggttatg	420
catttgaaac	ccaagtctgg	ttcttggttt	ggattttctc	tctgg		465

<210> 233
 <211> 366
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(366)
 <223> n = A,T,C or G

<400> 233						60
cagtaaaaaa	ggttatgttt	tattaattgc	tggaacaaccg	tggaaaaaca	aataagcaat	120
tgacaccacc	aaattcttat	tacattcaan	ataaaanatt	tattcacacc	acaaaaagat	180
aatcacacaa	aaatatacac	taacttaaaa	aacaaaagat	tatagtgcac	taaaatgtta	240
tattctcttt	ttaagtgggt	aaaagtattt	tggttgcttc	tacataaatt	tctattcatg	300
ananaataac	aaatattaaa	atacagtgat	agtttgcatt	tcttctatag	aatgaacata	360
gacataaccc	tgaagctttt	agtttacagg	gagtttccat	gaagccacaa	actaaactaa	366
ttatca						

<210> 234
 <211> 379
 <212> DNA
 <213> Homo sapien

<400> 234						60
gagggcagcc	ctcctacctg	cgcacgtggt	gcgcgcgctg	ctgcctcccg	ctcgccttga	120
accagtgcc	tgacagccatg	gctcccggcc	agctgcgctt	atttagtgct	tctgacaaaa	180
ccggccttgt	ggaatttgca	agaaacctga	ccgctcttgg	tttgaatctg	gtcgccttccg	240
gagggactgc	aaaagctctc	agggatgctg	gtctggcagt	cacagatgct	tctgagttga	300
cgggatttct	gaaatgttgg	ggggacgtgt	gaaaactttg	catcctgcac	gatcccatgc	360
tggaatccta	gctcctaata	ttcagaagat	aatgcttgac	atgcgccaca	cttgattcaa	379
tcttataaca	attgttgcc					

<210> 235
 <211> 406
 <212> DNA
 <213> Homo sapien

<400> 235						60
caggctgcac	catgtacccc	accttcagtt	taaaagaaaa	aaaaaatccc	cttcactcct	120
actgggaggt	gggacccctt	tcattttcag	ttttgctcat	ctagggaaaa	taaggctttg	180
gtttccagtt	taattgtttt	tgaccttota	aaatgttttt	atgttagcac	tgatagttgg	240
cattactggt	gttaagcact	gtgttccaga	ccgtgtctga	cttagtgtaa	cctaggagat	300
tttatagttt	tattttaatg	aaaccctgat	tgacgcacag	cagtggggag	aacagcgtct	360
tttacctgtc	accgaagcca	ggaagccccc	tttgtaagcg	tgtgttggg	tgctttattg	406
tacatcctcc	agtggcgctc	tttttactct	aatgttcttt	tggttt		

<210> 236
 <211> 278
 <212> DNA
 <213> Homo sapien

<400> 236						60
gagattagca	cctgtgaaca	atgCGttctc	tgatgacact	ctgagcatgg	accaacgcct	120
tcttaagcta	attctgcaaa	atcacatatt	gaaagtaaaa	gttggcctta	gCGacctcta	180
caatggacag	atactggaaa	ccattggagg	caaacaactc	cgagtctttg	tgtatcggac	240
ggctatctgc	atagaaaact	catgcatggt	gagaggaagc	aagcagggaa	ggaacggtgc	278
cattcacata	ttccgagaga	tcattcaacc	agcagaat			

<210> 237
 <211> 322
 <212> DNA
 <213> Homo sapien

<400> 237						60
cagggccgtg	gCGgaggagg	agCGctgcac	ggtggagcgt	cgggCCgacc	tcacctacgc	120
ggagttcgtg	cagcagtagc	tgCGcccctg	atCGcggagg	tcCGgtcctg	ttcaccggcc	180
cgtctgcccc	gaccgccccaa	ggCGccttc	ccctgacctc	gCGcgcacgc	gtggggctgg	240
ggCGgCGagg	ctggCGgtcc	ggcctggccg	cgactctgcc	cttctttcca	gaggttccgg	300
gccctgtgct	cccCGcagacg	gttgctggct	tcgtttgggg	acagagtggg	ccggtgagca	322
ccGCCaacac	ctactcctac	ct				

<210> 238
 <211> 613
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (399)
 <223> n=A,T,C or G

<400> 238						60
gaattcggca	ccagccttct	tgatcagga	ccagtctcca	ccccgtttct	acagtggaga	120
tcagcctcct	tcttatcttg	gtgcaagtgt	ggataaaactc	catcaccctt	tagaatttgc	180
agacaaatct	cccacacctc	ctaatttacc	tagcgataaa	atctaccctc	cttctgggtc	240
ccccgaagag	aataaccagca	cagccaccat	gacttacatg	acaactactc	cagcaacagc	300
ccaaatgagc	accaaggaag	ccagctggga	tgtggctgaa	caaccaccca	ctgctgattt	360
tgctgctgcc	acacttcagc	gcacgcacag	aactaatcgt	ccccttcccc	ctccgccttc	420
ccagagatct	gcagagcagc	caccagttgt	ggggcaggna	caagcagcaa	ccaatatagg	480
attaaataat	tcccacaagg	ttcaaggagt	agttccagtt	ccagagaggc	cacctgaacc	540
tcgagccatg	gatgaccctg	cgtctgcctt	catcagtgac	agtgggtgctg	ctgctgctca	600
gtgtcccatg	gctacagctg	tccagccagg	cctgcctgag	aaagtgcggg	acggtgcccg	613
ggtcccgctg	ctg					

<210> 239
 <211> 613
 <212> DNA
 <213> Homo sapiens

<400> 239
 gaattcggca ccaggggaca ctgggtgctga gctggatgat gatcagcact ggtctgacag 60
 cccgtcggat gctgacagag agctgcgttt gccgtgcccc gctgaggggg aagcagagct 120
 ggagctgagg gtgtcggaag atgaggagaa gctgcccggc tcaccgaagc accaagagag 180
 aggtccctcc caagccacca gcccctccg gtctccccag gaatcagctc ttctgttcat 240
 tccagtccac agcccctcaa cagagggggc ccaactccca cctgtccctg ccgccaccca 300
 ggagaaatca cctgaggagc gccttttccc tgagcctttg ctcccccagg agaagcccaa 360
 agctgatgcc ccctcggatc tgaaagctgt gcaactctcc atccgatcac agccagtgc 420
 cctgccagaa gctaggactc ctgtctcacc agggagcccg cagccccagc caccctgtgc 480
 ggctccacg cccccacca gcgagggtctc cagagccttc tctctcctgt gcaaaatggc 540
 aactcttaag gaaaaactca ttgcaccagt tgcggaagaa gaggcaacag ttccaaacaa 600
 taagatcact gta 613

<210> 240
 <211> 585
 <212> DNA
 <213> Homo sapiens

<400> 240
 gaattcggca cgagggtgaga tctacgatga actttaagat tggaggtgtg acagaacgca 60
 tgccaacccc agttattaaa gcttttggca tcttgaagcg agcggccgct gaagtaaacc 120
 aggattatgg tcttgatcca aagattgcta atgcaataat gaaggcagca gatgaggtag 180
 ctgaaggtaa attaaatgat cattttcctc tcgtggtatg gcagactgga tcaggaactc 240
 agacaaatat gaatgtaaat gaagtcatta gcaatagagc aattgaaatg ttaggaggtg 300
 aacttggcag caagatacct gtgcaccca acgatcatgt taataaaagc cagagctcaa 360
 atgatacttt tcccacagca atgcacattg ctgctgcaat agaagtccat gaagtactgt 420
 taccaggact acagaagtta catgatgctc ttgatgcaaa atccaaagag ttgacacaga 480
 tcatcaagat tggacgtact catactcagg atgctgttcc acttactctt gggcaggaat 540
 ttagtggtta tgttcaacaa gtaaaatatg caatgacaag aataa 585

<210> 241
 <211> 566
 <212> DNA
 <213> Homo sapiens

<400> 241
 gaattcggca ccaggcgagc tgcacctcga ggtgaaggcc tcaactgatga acgatgactt 60
 cgagaagatc aagaactggc agaaggaagc ctttcacaag cagatgatgg gcggcttcaa 120
 ggagaccaag gaagctgagg acggctttcg gaaggcacag aagccctggg ccaagaagct 180
 gaaagaggta gaagcagcaa agaaagccca ccatgcagcg tgcaaagagg agaagctggc 240
 tatctcacga gaagccaaca gcaaggcaga cccatccctc aacctgaac agctcaagaa 300
 attgcaagac aaaatagaaa agtgcaagca agatgttctt aagaccaaag agaagtatga 360
 gaagtccctg aaggaaactcg accagggcac accccagtag atggagaaca tggagcaggt 420
 gtttgagcag tgccagcagt tcgaggagaa acgccttcgc ttcttcggg aggttctgct 480
 ggaggttcag aagcacctag acctgtocaa tgtggctggc tacaagcca ttaccatga 540
 cctggagcag agcatcagag cagctg 566

<210> 242
 <211> 556
 <212> DNA
 <213> Homo sapiens

<400> 242
 gaattcggca cgagcaaagg tgaagcagga catgcctccg cccgggggct atgggcccac 60

```

cgactacaaa cggaacttgc cgcgtcgagg actgtcgggc tacagcatgc tggccatag 120
gattggaacc ctgatctacg ggcaactggag cataatgaag tggaaaccgtg agcgaggcg 180
cctacaaatc gaggacttcg aggctcgcac cgcgtgttg ccaactgttac aggcagaaac 240
cgaccggagg accttgca gaacttcggga gaacctggag gaggaggcca tcatcatgaa 300
ggacgtgccc gactggaagg tgggggagtc tgtgttccac acaaccgct ggggtgcccc 360
cttgatcggg gagctgtaag ggctgcgcac cacagaggag gctctccatg ccagccacgg 420
cttcatgtgg tacacgtagg ccctgtgccc tccggccacc tggatccctg cccctcccca 480
ctgggacgga ataatgctc tgcagacctg gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 540
aaaaaaaaa ctcgag 556

```

<210> 243
 <211> 591
 <212> DNA
 <213> Homo sapiens

```

<400> 243
gtctatgttt gcagaaatac agatccaaga caaagacagg atgggcactg ctggaaaagt 60
tattaaatgc aaagcagctg tgctttggga gcagaagcaa cccttctcca ttgaggaaat 120
agaagtggcc ccaccaaaga ctaaagaagt tcgcattaag attttggcca caggaatctg 180
tcgcacagat gaccatgtga taaaaggaac aatgggtgtc aagtttccag tgattgtggg 240
acatgaggca actgggattg tagagagcat tggagaagga gtgactacag tgaaaccagg 300
tgacaaagtc atccctctct ttctgccaca atgtagagaa tgcaatgctt gtcgcaaccc 360
agatggcaac ctttgcatta ggagcgatat tactggctgt ggagtactgg ctgatggcac 420
caccagattt acatgcaagg gcaaaccagt ccaccacttc atgaacacca gtacatttac 480
cgagtacaca gtggtggatg aatcttctgt tgctaagatt gatgatgcag ctccctctga 540
gaaagtctgt ttaattggct gtgggttttc cactggatat ggcgctgctg t 591

```

<210> 244
 <211> 594
 <212> DNA
 <213> Homo sapiens

```

<400> 244
gaattcggca cgagaacaga gtgaactgag catcagtcag aaaaagtcta tgtttgcaga 60
aatacagatc caagacaaag acaggatggg cactgctgga aaagtatta aatgcaaagc 120
agctgtgctt tgggagcaga agcaaccctt ctccattgag gaaatagaag ttgccccacc 180
aaagactaaa gaagttcgca ttaagatttt ggccacagga atctgtcgca cagatgacca 240
tgtgataaaa ggaacaatgg tgtccaagtt tccagtgatt gtgggacatg aggcaactgg 300
gattgtagag agcattggag aaggagtgcac tacagtgaaa ccaggtgaca aagtcatccc 360
tctctttctg ccacaatgta gagaatgcaa tgcctgtcgc aaccagatg gcaacccttg 420
cattaggagc gatattactg gtcgtggagt actggctgat ggcaccacca gatttacatg 480
caagggcaaa ccagtcacc accctcatgaa caccagtaca tttaccgagt acacagtggg 540
ggatgaatct tctgttgcta agattgatga tgcagctcct cctgagaaag tctg 594

```

<210> 245
 <211> 615
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (105)
 <223> n=A,T,C or G

<400> 245
 gtccctttcc tctgctgccg ctcggtcacg cttgtgcccg aaggaggaaa cagtgcaga 60
 cctggagact gcagttctct atccttccac agctctttca ccatnctgga tcacttcctt 120
 tgaatgcaga agcttgctgg ccaaaagatg tgggaattgt tgcccttgag atctattttc 180
 cttctcaata tgttgatcaa gcagagttgg aaaaatatga tgggttagat gctggaaagt 240
 ataccattgg cttggggccag gccaaagatg gcttctgcac agatagagaa gatattaact 300
 ctctttgcat gactgtgggt cagaatctta tggagagaaa taacctttcc tatgattgca 360
 ttggggcggct ggaagttgga acagagacaa tcatcgacaa atcaaagtct gtgaagacta 420
 atttgatgca gctgtttgaa gactctggga atacagatat agaaggaatc gacacaacta 480
 atgcatgcta tggaggcaca gctgctgtct tcaatgcttg ttaactggat tgagtccagc 540
 tcttgggatg gacggtatgc cctggttaagt tgcaggagat attgctgtat atgccacagg 600
 aatgctaga cctac 615

<210> 246
 <211> 546
 <212> DNA
 <213> Homo sapiens

<400> 246
 gaattcggca ccaggctgcc tcccgcctgc cctgaaccca gtgcctgcag ccatggctcc 60
 cggccagctc gccttattta gtgtctctgc aaaaccggcc ttgtgaattt gcaagaaacc 120
 tgaccgctct tggtttgaat ctggctgcct cgggaggac tgcaaaagct ctcagggatg 180
 ctggctctggc agtcagagat gtctctgagt tgacgggatt tcctgaaatg ttggggggac 240
 gtgtgaaaac tttgcatcct gcagtcctat ctggaatcct agctcgtaat attccagaag 300
 ataatgctga catggccaga cttgatttca atcttataag agttgttgcc tgcaatctct 360
 atccctttgt aaagacagtg gcttctccag gtgtaactgt tgaggaggct gtggagcaaa 420
 ttgacattgg tggagtaacc ttactgagag ctgcagccaa aaaccacgct cgagtgcagc 480
 tgggtgtgtga accagaggac tatgtgggtg ggtgtccacg gagatgcaga gctccgagag 540
 taagga 546

<210> 247
 <211> 564
 <212> DNA
 <213> Homo sapiens

<400> 247
 gaattcggca ccagagatca cgtgcagtga gatgcagcaa aaagttgaac ttctgagata 60
 tgaatctgaa aagcttcaac aggaaaattc tattttgaga aatgaaatta ctactttaaa 120
 tgaagaagat agcatttcta acctgaaatt agggacatta aatggatctc aggaagaaat 180
 gtggcaaaaa acggaaactg taaaacaaga aaatgctgca gttcagaaga tggttgaaaa 240
 tttaaagaaa cagatttcag aattaaaaat caaaaaccaa caattggatt tggaaaatac 300
 agaacttagc caaaagaact ctcaaaaacca ggaaaaactg caagaactta atcaacgtct 360
 aacagaaatg ctatgccaga aggaaaaaga gccaggaaac agtgcatagg aggaacggga 420
 acaagagaag tttaatctga aagaagaact ggaacgttgt aaagtgcagt cctccacttt 480
 agtgtcttct ctggaggcgg agctctctga agttaaaata cagaccata ttgtgcaaca 540
 ggaaaaccac cttctcaaag atga 564

<210> 248
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 248
 gttcttgttt gtggatcgct gtgatcgtca cttgacaatg cagatcttcg tgaagactct 60

gactggtaag accatcaccc tcgaggttga gccagtgac accatcgaga atgtcaaggc 120
 aaagatccaa gataaggaag gcatccctcc tgaccagcag aggctgatct ttgctggaaa 180
 acagctggaa gatgggcgca ccctgtctga ctacaacatc cagaaagagt ccaccctgca 240
 cctggtgctc cgtctcagag gtgggatgca aatcttcgtg aagacactca ctggcaagac 300
 catcacccctt gaggtggagc ccagtgcac catcgagaac gtcaaagcaa agatccagga 360
 caaggaaggc attcctcctg accagcagag gttgatcttt gccggaaagc cagcctggga 420
 agatggggcc gccca 434

<210> 249

<211> 416

<212> DNA

<213> Homo sapiens

<400> 249
 gcgggcccag gaggcggcgg cggcggcgcc ggacgggccc cccgcggcag acggcgagga 60
 cggacaggac ccgcacagca agcacctgta cacggccgac atgttcacgc acgggatcca 120
 gagcgcgcgc cacttcgtca tgttcttcgc gccctgggtg ggacactgcc agcggctgca 180
 gccgacttgg aatgacctgg gagacaaata caacagcatg gaagatgcca aagtctatgt 240
 ggctaaagtg gactgcacgg cccactccga cgtgtgctcc gcccggggg tgcgaggata 300
 cccacacctta aagcttttca agccaggcca agaagctgtg aagtaccagg gtcctcgga 360
 ctccagaca ctggaact ggatgctgca gacactgaac gaggagccag tgacac 416

<210> 250

<211> 504

<212> DNA

<213> Homo sapiens

<400> 250
 gaattcggca cgaggcgggt aacgttatag tatttgtcag aagttgggt ctccgtgggc 60
 attgtgatcc gtcccaggca gtggattagg aggccagaag gagatccctt ccacggtgct 120
 aggctgagat ggatcctctc agggcccaac agctggctgc ggagctggag gtggagatga 180
 tggccgatat gtacaacaga atgaccagt cctgccaccg gaagtgtgtg cctcctcact 240
 acaaggaagc agagctctcc aagggcgagt ctgtgtgcct ggaccgatgt gtctctaagt 300
 acctggacat ccattgacgg atgggcaaaa agttgacaga gttgtctatg caggatgaag 360
 agctgatgaa gaggtgacg cagagctctg ggcctgcatg aggtccctgt cagtatacac 420
 cctgggggtgt accccacccc ttcccacttt aataaacgtg ctccctgttg ggtgtcatct 480
 gtgaagactg ccaggcctag ctct 504

<210> 251

<211> 607

<212> DNA

<213> Homo sapiens

<400> 251
 gatgaaaata cacaatttta ctagcaaagt cctctactgt aatcgctatt taccacaga 60
 tactctgctc aaccatatgt taattcatgg tctgtcttgc ccatattgcc gttcaacttt 120
 caatgatgtg gaaaagatgg ccgcacacat gcggatggtt cacattgatg aagagatggg 180
 acctaaaaca gattctactt tgagttttga tttgacattg cagcagggtg gtcacactaa 240
 catccatctc ctggtacta catacaatct gagggatgcc ccagctgaat ctggtgctta 300
 ccattgccc aaataatctc cagttcctcc aaagccacag ccaaagggtc aggaaaaggc 360
 agatatccct gtaaaaagtt cacctcaagc tgcagtgcc tataaaaaag atgttgggaa 420
 aaccctttgt cctctttgct tttcaatcct aaaaggacc atatctgat cacttgaca 480
 tcacttacga gagaggcacc aagttattca gacggttcac ccagttgaga aaaagctcac 540
 ctacaaatgt atccattgcc ttggtgtgta taccagcaac atgaccgcct caactatcac 600

tctgcat

<210> 252
 <211> 618
 <212> DNA
 <213> Homo sapiens

<400> 252
 gaattcgac caggggtcct gctgggtcttc gcctttcttc tccgcttcta ccccgctcggc 60
 cgetgccact ggggtccctg gccccaccga catggcgcg gtgttgagca agtcctggag 120
 cgcacggagc tgaacaagct gcccgaagtct gtccagaaca aacttgaaaa gttccttgct 180
 gatcagcaat ccgagatcga tggcctgaag gggcggcctg agaaatttaa ggtggagagc 240
 gaacaacagt attttgaaat agaaaagagg ttgtcccaca gtcaggagag acttgtgaat 300
 gaaacccgag agtgtcaaag cttgcggctt gagctagaga aactcaacaa tcaactgaag 360
 gcaactaactg agaaaaacaa agaacttgaa attgtctcagg atcgcaatat tgccattcag 420
 agccaattta caagaacaaa ggaagaatta gaagctgaga aaagagactt aattagaacc 480
 aatgagagac tatctcaaga acttgaatac ttaacagagg atgttaaaccg tctgaatgaa 540
 aaacttaaag aaagcaatac aacaaagggt gaacttcagt taaaattgga tgaacttcaa 600
 gcttctgatg tttctggt 618

<210> 253
 <211> 1201
 <212> DNA
 <213> Homo sapiens

<400> 253
 gaattcggca ccagggtggc gagecgggct gctgtgctgg ggcgagcagc ggggaccgtg 60
 tgtgagtttg gcatgatttg gtccctcggg attctgcctt agcaagaaag aagttggaaa 120
 tacttcttgg aagaaaaacta aaacaatata aaagccacag cttattgatt gcatgtcagc 180
 ccccttacaa atatggacac atttcttagc ctatttccac ctggaggaga tagtaggctg 240
 aatcctgagc ctgagttcca aaatatgtta attgatgaaa gggtagctg tgaacatcat 300
 aaacataatt atcaggctct gaaaattgaa caaaaagggt tgcaggaaga atatgtaaaa 360
 tcacaaaatg aacttaaacc tgtattaatt gaaaagcaag caagccagga aaaattccaa 420
 ctgctccttg aagacttaag gggagaatta gtagagaaag ctagagacat agaaaaaatg 480
 aaactgcagg tactaacacc acaaaaattg gaattggtaa aagcccaact acaacaagaa 540
 ttagaagctc caatgcgaga acgttttcgg actcttgatg aagaagtgga aaggtacaga 600
 gctgagtata acaagctgcg ctacgagtat acatttctca agtcagagtt tgaacaccag 660
 aaagaagagt ttactcgggt ttcagaagaa gagaaaatga aatacaagtc agaggttgca 720
 cgactggaga aggacaaaga ggagctacat aaccagctgc ttagtggtga tcccacgaga 780
 gacagcaaac gaatggagca acttgttcga gaaaaaacc atttgcttca gaaattgaaa 840
 agtttagagg ctgaagtgc agaattaagg gctgagaaag aaaattctgg tgctcaggta 900
 gaaaatgtcc aaagaatata ggtgaggcag ttggctgaga tgcaggctac actcagatcc 960
 ttggaggctg aaaagcagtc agctaaacta caagctgagc gtttagaaaa agaactacaa 1020
 tcaagcaatg aacagaatac ctgcttaatc agcaaaactgc atagagctga ccgagaaatc 1080
 agcacactgg ccagtgaagt gaaagagctt aaacatgcaa acaaactaga aataactgac 1140
 atcaaaactgg aggcagcaag agctaagagt gagctcgaaa gagaaaggaa taagatccaa 1200
 a 1201

<210> 254
 <211> 560
 <212> DNA
 <213> Homo sapiens

<400> 254

gaattcggca ccagtttggg ggggtgaggt taattggaaa tgggtctctgg ggactgaaaa 60
 ctgatgtttt tgcagattac ctcagggaaa cggaggtttg ttgagttaca gacacattaa 120
 accaaaggcc gtgggaaaaac ccctctccag ctccagggga ttggtcagga ccaccacta 180
 accagtgcct tccttcttaa cattcacttt tagcagcttg tgtttatttt acatgggcag 240
 ttttgatggg aaattgccat gaccacaggg gtttgaggt ctgctttttt ttttcttct 300
 tctttttcgg gggactgggg gactcctccc aagatcacat tttagcatct ttctctccta 360
 ctccatttag aaaaataagt aacaggtgaa atgtggtctc agtgtaacg ggataattct 420
 gctaccggct cctccctgat gattctgaaa tacactactg aacgagctct ggctggctct 480
 ttctatcctg gatgtggttc ttctgtgtag caattccttg atgtccagtt tggaaagatg 540
 tactcttctc aacaagaaaa 560

<210> 255
 <211> 612
 <212> DNA
 <213> Homo sapiens

<400> 255
 gaattcggca ccaggcgggg cagcagggcc gcggccatgg ggagcttgaa ggaggagctg 60
 ctcaaagcca tctggcacgc cttcaccgac tcgaccagga ccacagggca aggtctccaa 120
 gtcccagctc aaggtccttt ccataacct gtgcacgggt ctgaagggtc ctcatgaccc 180
 agttgccttt gaagagcact tcagggatga tgatgagggt ccagtgtcca accagggtta 240
 catgccttat ttaaacaggt tcatttttga aaaggtccaa gacaactttg acaagattga 300
 attcaatagg atgtgttgga ccctctgtgt caaaaaaaaa cctcaciaag aatccccctgc 360
 tcattacaga agaagatgca tttaaaatat gggttatttt caacttttta tctgaggaca 420
 agtatccatt aattattgtg tcagaagaga ttgaatacct gcttaagaag cttacagaag 480
 ctatgggagg aggttggcag caagaacaat ttgaacatta taaaatcaac tttgatgaca 540
 gtaaaaatgg cctttctgca tgggaactta ttgagcttat tggaaatgga cagtttagca 600
 aaggcatgga cc 612

<210> 256
 <211> 1132
 <212> DNA
 <213> Homo sapiens

<400> 256
 gaattcggca cgaggtcttg gagaggcctc tggagcagga ggcccagtg ctcttctgac 60
 ccaaggcccc gccgtccagc ttctaagtgc cagatgatgg aggagcgtgc caacctgatg 120
 cacatgatga aactcagcat caaggtgttg ctccagtcgg ctctgagcct gggccgcagc 180
 ctggatgcgg accatgcccc cttgcagcag ttctttgtag tgatggagca ctgcctcaaa 240
 catgggctga aagttaagaa gagttttatt ggccaaaata aatcattctt tggctccttg 300
 gagctggtgg agaaaactttg tccagaagca tcagatatag cgactagtgt cagaaatctt 360
 ccagaattaa agacagctgt gggaagaggc cgagcgtggc tttatcttgc actcatgcaa 420
 aagaaactgg cagattatct gaaagtgcct atagacaata aacatctctt aagcgagttc 480
 tatgagcctg aggttttaat gatggaggaa gaagggatgg tgattgttgg tctgctggtg 540
 ggactcaatg ttctcgatgc caatctctgc ttgaaaggag aagacttggg ttctcaggtt 600
 ggagtaatag atttttccct ctaccttaag gatgtgcagg atcttgatgg tggcaaggag 660
 catgaaagaa ttactgatgt ccttgatcaa aaaaattatg tgggaagaact taaccggcac 720
 ttgagctgca cagttgggga tcttcaaacc aagatagatg gcttggaaaa gactaactca 780
 aagcttcaag aagagctttc agctgcaaca gaccgaattt gctcacttca agaagaacag 840
 cagcagttaa gagaacaaaa tgaattaatt cgagaaagaa gtgaaaagag tgtagagata 900
 acaaaacagg ataccaaagt tgagctggag acttacaagc aaactcggca aggtctggat 960
 gaaatgtaca gtgatgtgtg gaagcagcta aaagaggaga agaaagtccg gttggaactg 1020
 gaaaaagaac tggagttaca aattggaatg aaaaccgaaa tggaaaattgc aatgaagtta 1080
 ctggaaaagg acaccacga gaagcaggac acactagttg ccctccgcca gc 1132

118

<210> 257
 <211> 519
 <212> DNA
 <213> Homo sapiens

<400> 257
 gaattcgtga cactgaggtgc tcgagatgaa cccagcgcc cccagctacc ccatggcctc 60
 tctgtacgtg ggggacctgc accccgacgt gaccgaggcg atgctctacg agaagttcag 120
 cccggccggg cccatcctct ccatccgggt ctgcaggac atgatcacc gccgctcctt 180
 gggctacgag tacgtgaact tccagcagcc ggcggacgag gaacgtgctt tggacaccat 240
 gaattttgat gttataaaag gcaagccagt acgcatcatg tggctcagc gtgatccatc 300
 acttcgcaaa agtggagtag gcaacatatt cattaaaaat ttggacaaat ccatcgacaa 360
 taaagcacta tatgatacgt tttctgcgtt tggtaacatc ctttcatgta aggtgggttg 420
 tgatgaaaat ggctccaagg gctatggatt tgtacacttt gaaacacagg aagcagctga 480
 aagagctatt gaaaaaatga atgggatgct tctaaatga 519

<210> 258
 <211> 596
 <212> DNA
 <213> Homo sapiens

<400> 258
 gctttgcca agacttagaa gctaagcaga aaatgagctt aacatcctgg tttttgtga 60
 gcagtggagg cactcgccac aggctgccac gaaaaatgat tttgttgga agagatgact 120
 gtgagctcat gttgcagtct cgtagtgttg ataagcaaca cgctgtcatc aactatgatg 180
 cgtctacgga tgagcattta gtgaaggatt tgggcagcct caatgggact tttgtgaatg 240
 atgtaaggat tccggaacag acttatatca ccttgaaact tgaagataag ctgagatttg 300
 gatatgatac aaatcttttc actgtagtac aaggagaaat gaggggtccct gaagaagctc 360
 ttaagcatga gaagtttacc attcagcttc agttgtccca aaaatcttca gaatcagaat 420
 tatccaaatc tgcaagtgcc aaaagcatag attcaaagg agcagacgct gctactgaag 480
 tgcagcacia aactactgaa gcaactgaaat ccgaggaaaa agccatggat atttctgcta 540
 tgccccgtgg tactccatta tatgggcagc cgtcatggtg gggggatgat gaggtg 596

<210> 259
 <211> 595
 <212> DNA
 <213> Homo sapiens

<400> 259
 gaattcggca ccagagaaaa agcttcaagg tatattgagt cagagtcaag ataaatcact 60
 tcggagaatt tcagaattaa gagaggagct gcaaatggac cagcaagcaa agaaacatct 120
 tcaggacgag tttgatgcat gtttgaggga gaaagatcag tatatcagtg ttctccagac 180
 tcaggtttct cttctaaagc agcgattaca gaatggccca atgaatgttg atgctcccaa 240
 acccctccct cccggggagc tccaggcaga agtgacaggt gacacggaga agatggaggg 300
 cgtcggggaa ccagtgggag gtgggacttc cgctaaaacc ctggaaatgc tccagcaaag 360
 agtgaaaacgt caggagaatc tgcttcagcg ctgtaaggag acaattgggt cccacaagga 420
 gcagtgcgca ctgctgctga gtgagaagga ggcactgcag gagcagtttg atgaaaggct 480
 gcaggagctg gaaaagatga aggggatggt aataaccgag acgaagcggc aaatgcttga 540
 gaccctggaa ctgaaagaag atgaaattgc tcagcttcgt agtcatatca aacag 595

<210> 260
 <211> 994
 <212> DNA

<213> Homo sapiens

<400> 260
 gaattcggca cgaggcggtg cctgccttct tgctgtctat cagcctttct tgcctcttcc 60
 ttttcgcctt ccctgttctt ccctttctca aacaaacaag acatggcaaa ccgcagtcta 120
 acccagccct ttgaaattat ccatagtttt acagacagct ccaggccatg agccacaatg 180
 tccaaaatta ttcttgagca ctgatataaa ttacttagac cttctttgag ggcagaactc 240
 agctgttgct ctcctgatgg gcagtgtctg aaaggggtct ggtatgtctt caaaatgagt 300
 ccacgagttt actgagtgtc tacaggtaaa ggaatgaata taagatgtct ttctgatcag 360
 aacaggtgtc ccttcacatg agctttacta gactctggga gggaaaagta gccaaagtact 420
 tctgaaccat tttttaatac ttgttttgct atgggtgaaat tatagcagtt atcccaaaat 480
 gttttaatta tcaaaatact gtcttttaaa aaaaaaaaaa agtaacacct tttaaagcat 540
 tagatttcac ttgggtttct tttccaaaaa atgctaggta gacaaggcat tgtaaacatg 600
 agtttccttt aagaaccatc agaataataa ttttaacatga agaaaactgc tataatctagt 660
 agaaataata tctaaagttt aacaactaaa gtaccctcac agaataagcaa atacccttct 720
 gttctggaca tgggttcaaa tttgaatatg gaaataattt ccttggaagt ccctagaggc 780
 aggtcagagg aagtatgcat taagagggaagg aggagagaat ggaaataaaa gtcactataa 840
 tgcatattta tgccttattt ttttagcattt tttaaatgtt gggcttttca aggtgttttt 900
 tgctttttat tagatctata taaataagtt aactagcaat ttagttttgt atttaagcta 960
 cacttaatct ttttcttttg tgatatttat ttct 994

<210> 261

<211> 594

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (538)

<223> n=A,T,C or G

<400> 261
 gaattcggca ccagtggaga tccagctgaa ccatgccaac cgccaggctg cggaggcaat 60
 caggaaacctt cggaacaccc agggaaatgct gaaggacaca cagctgcacc tggacgatgc 120
 tctcagagggc caggacgacc tgaaagagca gctggccatg gttgagcgca gagccaacct 180
 gatgcaggct gagatcgagg agctcagggc atccctggaa cagacagaga ggagcaggag 240
 agtggccgag caagagctac tggatgccag tgagcgcgtg cagctcctcc acaccagaa 300
 caccagcctc atcaacacca agaagaagct ggagacagac atttcccaa tccagggaga 360
 gatggaagac atcgtccagg aagcccga cgcagaagag aaggccaaga aagccatcac 420
 tgatgccgcc atgatggcgg aggagctgaa gaaggagcag gacaccagcg cccacctgga 480
 gcggatgaag aagaacatgg agcagaccgt gaaggacctg cagcaccgtc tggacgangc 540
 tgagcagctt ggcgctgaag ggcgggcaag aagcagatcc agaaactgga ggct 594

<210> 262

<211> 594

<212> DNA

<213> Homo sapiens

<400> 262
 gaaaagggtg ctggagccaa aggcatagtc aggggttaatg ctcctttttc tttatcccaa 60
 atcagatagt gtttaggctt tttcatcaaa tataaaaacc cagcccagtt catgggtcat 120
 tcggcagcaa ccctgagacg ctttacagct ctgacccta aaagggtcaaa aggcggtctt 180
 atgtctcaata tacattttat taccatctt gccccggaca ttaaataaaa ctccaaaaat 240
 taaatccggc cctcaaacc cacaacagga cttaattgac ctcaccttca aggtgtagaa 300

taataaaaaa aaaaagttgc aattccttgc ctccgctgtg agacaaaccc cagccacatc 360
 tccagcacac aagaacttcc aaacgcctga accacagcag ccaggcggtc ctccagaacc 420
 tcttccccca ggagcttgc acatgtgccg gaaatctggc cactaggcca aggaatgcct 480
 gcagccccgg attcctccta agccgtgtcc catctgtgcg ggacccact gaaaatcgga 540
 ctgttcaact cacctggcag ccactctcag agaccctgga actctggccc aagg 594

<210> 263
 <211> 506
 <212> DNA
 <213> Homo sapiens

<400> 263
 gaattcggca cgagcggaaa cttagggggc acgtgagcca cggccacggc cgcattaggca 60
 agcaccggaa gcaccccggc ggccgcggta atgctgggtg tctgcatcac caccggatca 120
 acttcgacaa ataccaccca ggctactttg ggaaagtgg tatgaagcat taccacttaa 180
 agaggaacca gagcttctgc ccaactgtca accttgacaa attgtggact ttggtcagt 240
 aacagacacg ggtgaatgct gctaaaaaca agactggggc tgctcccatc attgatgtgg 300
 tgcgatcggg ctactataaa gttctgggaa agggaaagct cccaaagcag cctgtcatcg 360
 tgaaggccaa attcttcagc agaagagctg agggagaagt taagagtgtt gggggggcct 420
 gtgtcctggt ggcttgaagc cacatggagg gagtttcatt aaatgctaac tactttttaa 480
 aaaaaaaaaa aaaaaaaaaa ctcgag 506

<210> 264
 <211> 600
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (32)
 <223> n=A,T,C or G

<400> 264
 ggctcgtgaa cacacactga cagctatagg gnaggcgggc gcaccgtccc cgtttcccct 60
 cggcgggcgg gtgtcccgtc ggcgccctg aagtgaacca taaacatgtc ttgtgagagg 120
 aaaggcctct cggagctgcg atcggagctc tacttctcca tcgcccggtt cctggaagat 180
 ggacctgtc agcaggcggc tcaggtgctg atcccgagagg tggccgagaa ggagctgctg 240
 ccccgggcga cggactggac cgggaaggag catcccagga cctaccagaa tctggtgaag 300
 tattacagac acttagcacc tgatcacttg ctgcaaata gtcactgact aggacctctt 360
 cttgaacaag aaattcctca aagtgttcct ggagtacaaa ctttattagg agctggaaga 420
 cagtctttac tacgcacaaa taaaagctgc aagcatgttg tgtggaaagg atctgctctg 480
 gctgcgttgc actgtggaag accacctgag tcaccagtta actatggtag cccaccagc 540
 attgcggata ctctgttttc aaggaagctg aatgggaaat acagacttga gcgacttgtt 600

<210> 265
 <211> 534
 <212> DNA
 <213> Homo sapiens

<400> 265
 gaattcggca cgagtggagg gccatcatg gcgacgccc ctaagcggcg ggcggtggag 60
 gccacggggg agaaagtgt gcgtacgag accttcatca gtgacgtgct gcagcgggac 120
 ttgcgaaagg tgctggacca tcgagacaag gtatatgagc agctggccaa ataccttcaa 180
 ctgagaaatg tcattgagcg actccaggaa gctaagcact cggagttata tatgcagggt 240

gatttgggct gtaacttctt cgttgacaca gtggtcccag atacttcacg catctatgtg 300
 gccctgggat atgggttttt cctggagttg aacttgccag aagctctcaa gttcattgat 360
 cgtaagagct ctctcctcac agagctcagc aacagcctca ccaaggactc catgaatatc 420
 aaagcccata tccacatgtt gctagagggg cttagagaac tacaaggcct gcagaatttc 480
 ccagagaagc ctcaccattg acttcttccc cccatcctca gacattaaag agcc 534

<210> 266

<211> 552

<212> DNA

<213> Homo sapiens

<400> 266

gaattcggca ccagggcacc tccgcctcgc cgccgctagg tcggccggct ccgcccggct 60
 gccgcctagg atgaatatca tggacttcaa cgtgaagaag ctggcggccg acgcaggcac 120
 cttcctcagt cgcgcctgac agttcacaga agaaaagctt ggccaggctg agaagacaga 180
 attggatgct cacttagaga acctccttag caaagctgaa tgtaccaaaa tatggacaga 240
 aaaaataatg aaacaaactg aagtgttatt gcagccaaat ccaaagtcca ggatagaaga 300
 atttgtttat gagaaaactg atagaaaagc tccaagtcgt ataaacaacc cagaactttt 360
 gggacaatat atgattgatg cagggactga gtttgggcca ggaacagctt atggtaatgc 420
 ccttattaaa tgtggagaaa ccaaaaaaag aattggaaca gcagacagag aactgattca 480
 aacgtcagcc ttaaattttc ttactccttt aagaaaactt atagaaggag attacaaaac 540
 aattgctaaa ga 552

<210> 267

<211> 551

<212> DNA

<213> Homo sapiens

<400> 267

gaagcctacc agccagggtgc cggccccccc acccccggcc cagccccctc ctgcagcggt 60
 ggaagcggct cggcagatcg agcgtgaggc ccagcagcag cagcacctgt accgggtgaa 120
 catcaacaac agcatgcccc caggacgcac gggcatgggg accccgggga gccagatggc 180
 ccccgtagac ctgaatgtgc cccgacccaa ccaggtagac gggcccgta tgcccagcat 240
 gectcccggg cagtggcagc aggcgcccc tccccagcag cagcccatgc caggcttgcc 300
 caggcctgtg atatccatgc aggccaggc ggcctggct gggccccgga tgcccagcgt 360
 gcagccacc aggagcatct caccacgcgc tctgcaagac ctgctgcgga ccctgaagtc 420
 gccagctcc cctcagcagc aacagcagg gctgaacatt ctcaaatcaa acccgagct 480
 aatggcagct ttcattcaaac agcgcacagc caagtacgtg gccaatcagc ccggcatgca 540
 gccccagcct g 551

<210> 268

<211> 573

<212> DNA

<213> Homo sapiens

<400> 268

gaattcggca ccaggggttc ttgtgggcta gaagaatcct gcaaaaatgt ctctctatcc 60
 atctctcgaa gacttgaagg tagacaaagt aattcaggct caaactgctt tttctgcaaa 120
 ccctgccaat ccagcaattt tgtcagaagc ttctgtcct atccctcacg atggaaatct 180
 ctatcccaga ctgtatccag agctctctca atacatggg ctgagtttaa atgaagaaga 240
 aatacgtgca aatgtggccg tggtttctgg tgcaccactt caggggcagt tggtagcaag 300
 accttccagt ataaactata tgggtggctcc tgtaactggt aatgatgttg gaattcgtag 360
 agcagaaatt aagcaaggga ttcgtgaagt cattttgtgt aaggatcaag atggaaaaat 420
 tggactcagg cttaaatcaa tagataatgg tatatttgtt cagctagtcc aggctaattc 480

tccagcctca ttggttggtc tgagatttgg ggaccaagta cttcagatca atggtgaaaa 540
ctgtgcagga tggagctctg ataaagcgca caa 573

<210> 269
<211> 500
<212> DNA
<213> Homo sapiens

<400> 269
gaatcggcac caggaaacct ttattagcag agatagctgg cttggatcag attacgggga 60
atgtggggga gccatgaaga aactaactaa aggggagcct ttggggacca gggggagaca 120
agtcaactatt ttgagggaga aagctctgga ttgattctga caggacactt gagtgtgaac 180
tgtccaagct aagcctctgg gtgtgtagag agagccctta cagatagata gcacctttgc 240
tttcagagtga gaaggactag ccactaagga ccagaccaag atgcatgtag gtcactgaca 300
agcacctgat gaagaggagg ggtctcctcc aagtttgtgt ttggaactcc tcctgtgttc 360
aatttcctaa aagccataat ccagcaagct gaactcatga gaaggctctg ttcattgttg 420
gcatggaaga cagaacacag acggaaactg cagtgatggt gtgaagacac cacggatagg 480
ttaggggcag tgaggaggaa 500

<210> 270
<211> 224
<212> DNA
<213> Homo sapiens

<400> 270
gaattcggca cgagaagact acaatctcca gggaaacctg gggcgtctcg cgaaaacgtc 60
cataactgaa agtagctaag gcaccccgag cggagggaagt gagctctcct ggggcgtggt 120
tgttcgtgat ccttgcattt gttacttagg gtcaaggctt gggctcttgc ccgcagacct 180
ttgggacgac ccggccccag cgcagctatg aacctggagc gagt 224

<210> 271
<211> 447
<212> DNA
<213> Homo sapiens

<400> 271
gaattcggca cgaggetggg ccgggcccga gcgatcgcg ggctcgggct gcggggctcc 60
ggctcggggc gctgggcccgc gaggcgcgga gcttgggagc ggagcccagg ccgtgccgag 120
cggcgccatg aagggaagg aggagaagga gggcgccgca cggctgggag ctggcgccgg 180
aagccccgag aagagcccga gcgcgcagga gctcaaggag cagggaatc gtctgttcgt 240
gggcccgaag taccggagg cggcgccctg ctacggccgc gcgatcacc ggaacccgct 300
ggtggccgtg tattacacca accgggcctt gtgtacctg aagatgcagc agcacgagca 360
ggcctggcc gactgccggc gcgccctgga gctggacggg cagtctgtga aggcgcactt 420
cttctgggg cagtgccagc tggagat 447

<210> 272
<211> 606
<212> DNA
<213> Homo sapiens

<400> 272
gcaactactt atattccttt gatggataat gctgactcaa gtcctgtggt agataagaga 60
gaggttattg atttgcttaa acctgaccaa gtagaaggga tccagaaatc tgggactaaa 120
aaactgaaga ccgaaactga caaagaaaat gctgaagtga agtttaaaga ttttcttctg 180

tccttgaaga ctatgatgtt ttctgaagat gaggctcttt gtgtttaga cttgctaaag 240
 gagaagtctg gtgtaataca agatgcttta aagaagtcaa gtaagggaga attgactacg 300
 cttatacatc agcttcaaga aaaggacaag ttactcgctg ctgtgaagga agatgctgct 360
 gctacaaagg atcgggtgtaa gcagttaacc caggaaatga tgacagagaa agaaagaagc 420
 aatgtgggta taacaaggat gaaagatcga attggaacat tagaaaagga acataatgta 480
 tttcaaaaca aaatacatgt cagttatcaa gagactcaac agatgcagat gaagtttcag 540
 caagttcgtg agcagatgga ggcagagata gctcacttga agcaggaaaa tgggtatact 600
 ggagaa 606

<210> 273
 <211> 598
 <212> DNA
 <213> Homo sapiens

<400> 273
 gaattcggca ccaggccccg tcccgcggtc gcagctccag ccgcctctct cgcgcagccg 60
 ccgcctcagc tgctcgctct gtgggtcggt cctctccggc acttgggctc cagtcgcgcc 120
 ctccaagccc ttcaggccgc cccagtgtcc tctctcttct ccggccagac ccagccccgc 180
 gaagatggtg gaccgcgagc aactggtgca gaaagcccgg ctggccgagc aggcggagcg 240
 ctacgacgac atggcccgcg ccatgaagaa cgtgacagag ctgaatgagc cactgtcgaa 300
 tgaggaacga aaccttctgt ctgtggccta caagaacggt gtggggggcac gccgctcttc 360
 ctggagggtc atcagtagca ttgagcagaa gacatctgca gacggcaatg agaagaagat 420
 tgagatggtc cgtgctgacc gggagaagat agagaaggag ttggaggctg tgtgccagga 480
 tgtgctgagc ctgctggata actacctgat caagaattgc agcgagacc agtacgagag 540
 caaagtgttc tacctgaaga tgaaagggga ctactaccgc tacctggctg aagtggcc 598

<210> 274
 <211> 536
 <212> DNA
 <213> Homo sapiens

<400> 274
 gcaccaagag actaaacaag aaagtggatc agggaagaag aaagcttcat caaagaaaca 60
 aaagacagaa aatgtcttcg tagatgaacc ccttattcat gcaactactt atattccttt 120
 gatggataat gctgactcaa gtcctgtggt agataagaga gaggttattg atttgcttaa 180
 acctgaccaa gtagaaggga tccagaaatc tgggactaaa aaactgaaga ccgaaactga 240
 caaagaaaat gctgaagtga agtttaaaaga ttttcttctg tccttgaaga ctatgatgtt 300
 ttctgaagat gaggctcttt gtgtttaga cttgctaaag gagaagtctg gtgtaataca 360
 agatgcttta aagaagtcaa gtaagggaga attgactacg cttatacatc agcttcaaga 420
 aaaggacaag ttactcgctg ctgtgaagga agatgctgct gctacaaagg atcgggtgtaa 480
 gcagttaacc caggaaatga tgacagagaa agaaagaagc aatgtgggta taacaa 536

<210> 275
 <211> 494
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (379)
 <223> n=A,T,C or G

<400> 275
 gaattcggca ccagggtcgc gggtcttctgt tgtggatcgc tgtgatcgtc acttgacaat 60

gcagatcttc gtgaagactc tgactggtaa gaccatcacc ctcgagggtg agcccagtg 120
 caccatcgag aatgtcaagg caaagatcca agataaggaa ggcatccctc ctgaccagca 180
 gaggtgatc tttgctggaa aacagctgga agatgggagc accctgtctg actacaacat 240
 ccagaaagag tccaccctgc acctgggtgct ccgtctcaga ggtgggatgc aaatcttcgt 300
 gaagacactc actggcaaga ccatcaccct tgagggtggag cccagtgaca ccatcgagaa 360
 cgtcaaagca aagatccang acaaggaagg cattcctcct gaccagcaga ggttgatctt 420
 tgccggaaag cagctggaag atgggcgcac cctgtctgac tacaacatcc agaaagagtc 480
 taccctgcac ctgg 494

<210> 276

<211> 484

<212> DNA

<213> Homo sapiens

<400> 276

ggcttttaac cagaagtcaa acctgttcag acagaaggca gtcacagcag aaaaatcttc 60
 agacaaaagg cagtcacagg tgtgcaggga gtgtgggaga ggcttttagca ggaagtcaca 120
 gctcatcata caccagagga cacacacagg agaaaagcct tatgtctgag gagagtgtgg 180
 gcgaggcttt atagttgagt cagtcctccg caaccacctg agtacacact ccggggagaa 240
 accttatgtg tgcagccatt gtgggcgagg ctttagctgc aagccatacc tcatcagaca 300
 tcagaggaca cacacaaggg agaaatcggt tatgtgcaca gtgtgtgggc gaggcttttcg 360
 tgaaaagtca gagctcatta agcaccagag aattcacacg ggggataagc cttatgtgtg 420
 cagagattga ggccgaggct ttgtaaagga gatcatgtct caacacacac cagaggatta 480
 catt 484

<210> 277

<211> 513

<212> DNA

<213> Homo sapiens

<400> 277

gcttgaggct gccaatcaga gcttggcaga gctgagagat cagcggcagg gggagcgcct 60
 ggaacatgca gcagctttgc gggccctaca agatcaggta tccatccaga gtgcagatgc 120
 acaggaaaca gtggaagggc ttttggtgga gaacaatgcc ttgaggacta gcctggctgc 180
 cctggagcag atccaaacag caaagacca agaactgaat atgctccggg aacagaccac 240
 tgggtgtgca gctgagttgc agcagcagca ggctgagtag gaggacctta tgggacagaa 300
 agatgacctc aactcccagc tccaggagtc attacgggac aatagtcgac tgctggaaca 360
 acttcaagaa atagggcagg agaaggagca gttgacccag gaattacagg aggctcggaa 420
 gagtgcggag aagcggaagg ccatgcttgg atgagctagc aatggaaacg ctgcaagaga 480
 agtcccacac aaggaagagc ttgggagcag ttc 513

<210> 278

<211> 471

<212> DNA

<213> Homo sapiens

<400> 278

gaattcggca ccagccaagg ccctgtccct ggctcgggac cttgaagagg ccttggaagc 60
 caaagaggaa ctcgagcgga ccaacaaaat gctcaaagcc gaaatggaag acctggtcag 120
 ctccaaggat gacgtgggca agaacgtcca tgagctggag aagtccaagc gggccctgga 180
 gaccagatg gaggagatga agacgcagct ggaagagctg gaggacgagc tgcaagccac 240
 ggaggacgcc aaactgctgc tggaaagtaa catgcaggcg ctcaagggac agttcgaaag 300
 ggatctccaa gcccgggagc agcagaatga ggagaagagg aggcaactgc agagacagct 360
 tcacagagtat gagacggaac tggaaagcga gcgaaagcaa cgtgccctgg cagctgcagc 420

aaagaagaag ctggaagggg acctgaaaga cctggagctt caggccgact t

471

<210> 279
 <211> 497
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (457)
 <223> n=A,T,C or G
 <221> misc_feature
 <222> (471)
 <223> n=A,T,C or G

<400> 279
 gaattcggca cgaggccaca gaggcggcgg agagatggcc ttcagcgggt cccaggctcc 60
 ctacctgagt ccagctgtcc ccttttctgg gactattcaa ggaggtctcc aggacggact 120
 tcagatcact gtcaatggga cggttctcag ctccagtggg accaggtttg ctgtgaactt 180
 tcagactggc ttcagtggaa atgacattgc cttccacttc aaccctcggg ttgaagatgg 240
 agggtagctg gtgtgcaaca cgaggcagaa cggaagctgg gggcccaggg agaggaagac 300
 acacatgcct ttccagaagg ggatgccctt tgacctctgc ttccctgggtgc agagctcaga 360
 tttcaagggtg atggtgaacg ggatcctctt cgtgcagtac ttccaccgcg tgcccttcca 420
 ccgtgtggac accatctccg tcaatggctc tgtgcancgt tctacatca ncttcagac 480
 ccagacagtc atccaca 497

<210> 280
 <211> 544
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (451)
 <223> n=A,T,C or G

<400> 280
 gaattcggca ccagaatagg aacagctccg gtctacagct cccagcgtga gcgacgcaga 60
 agacgggtga tttctgcatt tccatctgag gtaccgggtt catctcacta gggagtgcc 120
 gacagtgggc gcaggccagt gtgtgtgcgc accgtgcgcg agccgaagca gggcgaggca 180
 ttgcctcacc tggaagcac aaggggtcag ggagttccct ttccgagtca aagaaagggg 240
 tgacggacgc acctggaaaa tcgggtcact cccacccgaa tattgtgctt ttcagaccgg 300
 cttaagaaac ggcgaccac gagactatat cccacacctg gctcagaggg tccacgccc 360
 acggaatctc gctgattgct agcacagcag tcttagatca aactgcaagg ggggcaacga 420
 ggctggggga gggcgcccg ccattgccca ngcttgctta ggtaaacaaa gcagccggga 480
 agcttgaact ggggtggagcc caccacagct caaggaggcc tgccctgcctc tgtagctcca 544
 cctc

<210> 281
 <211> 527
 <212> DNA
 <213> Homo sapiens

<220>

[illegible]

```
<220>  
<221> misc_feature  
<222> (494)  
<223> n=A,T,C or G
```

<400> 282						60
ggaagactgg	agcctttgcg	gcggcgctgc	ccctcccctg	gtccccgcga	gctcggaggg	120
cccggctggt	gctgcggggg	ccccgggagg	ttgaaaacta	agcatgggga	agagctgcaa	180
ggtggctcgtg	tgtggccagg	cgtctgtggg	caaaaacttc	atcctggagc	agcttctgta	240
tggaaccat	gtagtgggtt	cggagatgat	cgagacgcag	gaggacatct	acgtgggctc	300
cattgagaca	gaccgggggg	tgcgagagca	ggtgcgtttc	tatgacacc	gggggctccg	360
agatggggcc	gaactgcccc	gacactgctt	ctcttgcact	gatggctacg	tcctgggtcta	420
tagcacagat	agcagagagt	cttttcagcg	tgtggagctg	ctcaagaagg	agattgacaa	480
atccaaggac	aagaaggagg	tcaccatcgt	ggtccttggc	aacaagtg	acttacagga	514
gcagcggcgt	gtanacccaa	atgtggctca	acac			

```
<210> 283
<211> 484
<212> DNA
<213> Homo sapiens
```

<400> 283						60
gggcggggcgg	tggacagtca	tggcggcccg	gcgcggggct	ctcatagtgc	tggagggcgt	120
ggaccgcgcc	gggaagagca	cgcagagccg	caagctggtg	gaagcgtgt	gcgccgcggg	180
ccaccgcgcc	gaactgctcc	ggttcccgga	aagatcaact	gaaatcggca	aacttctgag	240
ttcctacttg	caaaagaaaa	gtgacgtgga	ggatcactcg	gtgcacctcg	ttttttctgc	300
aaatcgctgg	gaacaagtgc	cgtaaattaa	ggaaaagttg	agccaggggc	tgacctcgt	360
cgtggacaga	tacgcatttt	ctggtgtggc	cttcaccggt	gccaaaggaga	atttttccct	420
agactggtgt	aaacagccag	acgtgggect	tcccaaacc	gacctggtcc	tgttcctcca	480
gttacagctg	gcggatgctg	ccaagcgggg	agcgtttggc	catgagcgct	atgagaacgg	484
ggct						

$\langle 210 \rangle$	284
$\langle 211 \rangle$	514

<212> DNA
<213> Homo sapiens

<400> 284
gaattcggca cgaggcggag gccgcggagg ctccctcggtc cttcagcacc cctcggccccg 60
acgcacccac gcccctcacc ccccagagagc cgaaaatgga cccaagtggg gtcaaagtgc 120
tggaacagc agaggacatc caggagaggc ggcagcaggt cctagaccga taccaccgct 180
tcaaggaact ctcaaccctt aggcgtcaga agctggaaga ttcctatcga ttccagttct 240
ttcaaagaga tgctgaagag ctggagaaat ggatacagga aaaacttcag attgcatctg 300
atgagaatta taaagaccca accaacttgc agggaaagct tcagaagcat caagcatttg 360
aagctgaagt gcaggccaac tcaggagcca ttgttaagct ggatgaaact ggaaacctga 420
tgatctcaga agggcatttt gcattctgaaa ccatacggac ccgtttgatg gagctgcacc 480
gccagtggga attacttttg gagaagatgc gaga 514

<210> 285
<211> 383
<212> DNA
<213> Homo sapiens

<400> 285
gaattcggca cgaggcggg ctccaccgcg catcctgctc cactctggcg accgcccccg 60
gggccccgc cgcgggcgcg gcgccccga tgggcgagga ggactactat ctggagctgt 120
gcgagcggcc ggtgcagttc gagaaggcga accctgtcaa ctgcgtcttc ttcatgagg 180
ccaacaagca ggtttttgct gttcgtatctg gtggagctac tggcgtggta gttaaaggcc 240
cagatgatag gaatcccatc tcatttagaa tggatgacaa aggagaagtg aagtgcatta 300
agttttcctt agaaaataag atattggctg ttcagaggac ctcaaagact gtggattttt 360
gtaattttat ccctgataat tcc 383

<210> 286
<211> 943
<212> DNA
<213> Homo sapiens

<400> 286
gaattcggca ccagggccgt ggcggaggag gagegctgca cgggtggagcg tcgggccgac 60
ctcacctacg cggagttcgt gcagcagtag gtgcgcccct gatcgcgag gtgcgctcct 120
gttcaccggc ccgtctgccc cgaccgcca aggcgcgctt cccctgacct cgcgcgacg 180
cgtggggctg gggcgcgag gctggcggtc cggcctggcc gcgactctgc ccttctttcc 240
agaggttccg ggccctgtgc tcccgcgaca ggttgctggc ttcgtttggg gacagagtgg 300
tccggctgag caccgccaac acctactcct accacaaagt ggacttggcc ttccaggagt 360
atgtggagca gctgctgcac ccccaggacc ccacctccct gggcaatggt gaggcagccc 420
taggcggcgg tagggggtgg ggacgcttgg agtctccagg tgccaggatc cctgtccccg 480
ccgtctctgt tggcagacac cctgtacttc ttcggggaca acaacttcac cgagtggggc 540
tctctctttc ggactactc cccacccccca tttggcctgc tgggaaccgc tccagcttac 600
agctttggaa tcgcaggagc ttggtcgggg gtgccttcc actggcatgg acccggttac 660
tcagaagtga tctacgctg taagcgtgg ttcctttacc cacctgagaa gacgccagag 720
ttccacccca acaagaccac actggcctgg ctccgggaca cataccagc cctgccaccg 780
tctgcacggc ccctggagtg taccatccgg gctggtagg tgctgtactt ccccgaccgc 840
tggtggcatg ctacgctcaa ccttgacacc agcgtcttca tctccacctt cctcggctag 900
ccaaaacagc tggcaggact gccggtcaca caccagcacg tcc 943

<210> 287
<211> 1143
<212> DNA

<213> Homo sapiens

<400> 287
 gaattcggca cgagggaaga acagctgttg gaacaacaag aatattttaga aaaagaaatg 60
 gaggaagcaa agaaaatgat atcaggacta caggccttac tgctcaatgg atccttacct 120
 gaagatgaac aggagaggcc cttggccctc tgtgaaccag gtgtcaatcc cgaggaacaa 180
 ctgattataa tccaaagtcg tctggatcag agtatggagg agaatcagga cttaaagaag 240
 gaactgctga aatgtaaaca agaagccaga aacttacagg ggataaagga tgccttgacg 300
 cagagattga ctcagcagga cacatctgtt cttcagctca aacaagagct actgagggca 360
 aatatggaca aagatgagct gcacaaccag aatgtggatc tgcagaggaa gctagatgag 420
 aggaaccggc tcttgggaga atataaaaaa gagctggggc agaaggatcg ccttcttcag 480
 cagcaccagg ccaagttaga agaagcactc cggaactct ctgatgtcag ttaccaccag 540
 gtggatctag agcgagagct agaacacaaa gatgtcctct tggctcactg tatgaaaaga 600
 gaggcagatg aggcgaccaa ctacaacagt cacaactctc aaagcaatgg ttttctcctt 660
 ccaacggcag gaaaaggagc tacttcagtc agcaacagag ggaccagcga cctgcagctt 720
 gttcgagatg ctctccgcag cctgcgcaac agcttcagtg gccacgatcc tcagcaccac 780
 actattgaca gcttggagca gggcatttct agcctcatgg agcgctgca tgttatggag 840
 acgcagaaga aacaagaaag aaaggttcgg gtcaagtcac ccagaactca agtaggtagt 900
 gaataccggg agtcctggcc ccctaactca aagttgcctc actcacagag ctctccaact 960
 gtcagcagca cctgtactaa agtgctctat ttcactgacc ggtcacttac gcccttcag 1020
 gtcaatatac caaagagggt ggaggagggt acgttaaagg attttaaagc agctattgat 1080
 cgggaaggaa atcaccggta tcacttcaaa gcaactggatc ctgagtttgg cactgtcaaa 1140
 gag 1143

<210> 288

<211> 881

<212> DNA

<213> Homo sapiens

<400> 288
 gtgagagcgg gccgaggaga ttggcgacgg tgtcgcccggt gttttcgttg gcgggtgcct 60
 gggctggtgg gaacagccgc ccgaagggaag caccatgatt tcggccgcgc agttgttgg 120
 tgagttaatg ggccgggacc gaaacctagc cccggacgag aagcgacga acgtgcgggtg 180
 ggaccacgag agcgttttga aatattatct ctgtggtttt tgtcctgcgg aattgttcac 240
 aaatacacgt tctgatcttg gtccgtgtga aaaaattcat gatgaaaatc tacgaaaaca 300
 gtatgagaag agctctcggt tcatgaaagt tggctatgag agagattttt tgcgatactt 360
 acagagctta cttgcagaag tagaacgtag gatcagacga ggccatgctc gtttggcatt 420
 atctcaaaac cagcagttct ctggggccgc tggcccaaca ggcaaaaatg aagaaaaaat 480
 tcaggttcta acagacaaaa ttgatgtact tctgcaacag attgaagaat taggggtctga 540
 aggaaaagta gaagaagccc aggggatgat gaaattagtt gagcaattaa aagaagagag 600
 agaactgcta aggtccacaa cgtcgacaat tgaaagcttt gctgcacaag aaaaacaaat 660
 ggaagtgttg gaagtatgtg gagccttttt aatagtagga gatgccagat cccgggtaga 720
 tgaccatttg atgggaaaac aacacatggg ctatgccaaa attaaagcta ctgtagaaga 780
 attaaaagaa aagttaagga aaagaaccga agaacctgat cgtgatgagc gtctaaaaaa 840
 ggagaagcaa gaaagagaaa aaaaaaaa aaaaactcga g 881

<210> 289

<211> 987

<212> DNA

<213> Homo sapiens

<400> 289
 gaattcggca cgagggactg tggtttccag gaatgggtggc gtctcacgct ttttgtgctt 60
 tttccttttg ggctccgag cggctgggggt tgggggactg ggcaggaggc tccctgtaaa 120

```

catttggaact tgggctgggg caggggctgg tgttgggcaa agctgggggt ccaggctgga 180
gaagcagggg cccctccaga cgcagccttg ggagactcag catgtgcccc cctccccctca 240
tcacagaaca agacaatggt taaaaaccag aacagatgcc cagaaggggg taccatggcc 300
attaccagca tctcagacaa gggcaggctt caaacaggga ggcctgtggc aacccctccc 360
ctacgtctgg agctgagggg acagggggag ctgagaacaa agagaggaaa gaggagaaaa 420
gcggcggggg aacaggcggg gagcgtgatc ttcttgcccc catcttcctc aggggttggg 480
gggtacaaag tcggcgggtg cccatcccgc caggccccgc tgccttcag aagaggccgc 540
agtccttcag gttgttcttg atgatgacat cggtgacggc gtcaaacacg aactgcacgt 600
tcttggtgtc ggtggcgcac gtgaagtgcg tgtagatctc cttggtgtct ttgcgcttat 660
tcaggctctc aaacttactc tggatgtagc tggctgcctc atcatatttg ttggcccctg 720
tatactcagg gaagcagatg gtcaggggac tgtgtgtgat cttctcctca aacaggctct 780
tcttggttag gaagaggatg atggacgtgt ctgtgaacca cttgttgttg cagatgctat 840
cgaatagctt catgctctca tgcattcggt tcatctctc gtctcagct agcaccaagt 900
cataggcgct caaggctacg cagaagatga tggctgtgac gccctcaaag cagtggatcc 960
attctctccg ctcagaccgc tgaccac 987

```

```

<210> 290
<211> 300
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(300)
<223> n = A,T,C or G

```

```

<400> 290
gattcaagat gtacccatt gactttgaga aggatgatga cagcaacttt catatggatt 60
tcatcgtggc tgcatccaac ctccgggcag aaaactatga cattccttct gcagaccggc 120
acaagagcaa gctgattgca gggaagatca tcccagccat tgccacgacc acagcagccg 180
tggttgccct tgtgtgtctg gagctgtaca aggttgtgca ggggcaccga cancttgact 240
cctacangaa tgggtgcctc aacttgagcc ctgcctttct ttggtttctc tgaaccctt 300

```

```

<210> 291
<211> 352
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(352)
<223> n = A,T,C or G

```

```

<400> 291
aaccaagctg ccaccggggg tggatcggat gcggcttgag aggcattctgt ctgccgagga 60
cttctcaagg gtatttgcca tgtcccctga agagtgtggc aagctggctc tgtggaagcg 120
gaatgagctc aagaagaagg cctctctctt ctgatggccc ccacctgctc cgggacggcc 180
cccttaccct tgctgcttca gggtttttcc ccggcgggtt gggaggggca ggaggtgggg 240
tggaatngg gtgggcnctt ttctcagggt agagnggggg gccaaaacct ctgcngtccc 300
cggagnagac tatggacttt cttccccctc acaaggntgg gggcctcctg ct 352

```

```

<210> 292
<211> 511

```

<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(511)
<223> n = A,T,C or G

<400> 292
cgcggtggct ggcactcng cctgagaaac tcggcaagcg cgcagtgtcg actccccggt 60
ctatgccagg cgcattctcag ctaatccaaa agtaaagtag aaacttagaa aaagattgcc 120
aattccaaat caacatattt agagaaaatt ggaaaaggag aagcttacta cagctttatt 180
tgaggacttt ttaaagaacg ctgggttcta tctgtgagct gcaaattctg gagcaaaaac 240
cagagacatt gccagagcaa acaagaacag aaatacaaat ggagaactgg tcaaaagaca 300
taaccacag ttatcttgaa caagaaacta cggggataaa taaaagtacg canccagatg 360
agcaactgac tatgaattct gagaaaagta tgcattcgga atccactgaa ttagntaatg 420
aaataacatg ngagaacaca gaatggccag gggcagagat caacgaattt tcanatcatc 480
agttcttatc cagatgatga gtctgtttac t 511

<210> 293
<211> 526
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(526)
<223> n = A,T,C or G

<400> 293
gataaaaaaga actttaatgg aaggcactgt tgtccaaaat cacataaagg gtaagagccc 60
acacggtacc accctgctct cctacttctc aaacccacat ccaccacca gacaggaggg 120
tgcanacccc acaggaaatt acctcccgga gcactgactg atatttttcc ttaaaacaaa 180
aaaatggctg tctcagacta ataacagaac atcttaagag ctataccagc tattacagcc 240
tggtaatana agcagcttct taanaattcc caagtttata anaggcccaa naaatgcatt 300
tattctgttg tctattaagc ctccatgaca aggagaaagt tatgagtaaa tccttggttc 360
atcaggagtt aagagctgtg ngcctcatga ggagttaana gctgtgtgca taagcagggt 420
caagaaacaa actcctgttt gtttgctctt ttgatgggtc aaaaacattc agctgcttcc 480
acctctanga caaatgctt aaagaattta ctctcatcac cttggg 526

<210> 294
<211> 601
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(601)
<223> n = A,T,C or G

<400> 294
actttaaaag ccaaatatat ttttaaaaga tcatgcttat aataagtaaa ttacncatta 60
aggaaacatc aaaataaagt agatgaataa aaaggcacac tcgaaaaatt tgagcgcaga 120
aaggacagtt cttttgttt tgtttctaata gtcggaagaa aaagaaagag atatattaaa 180

atcattgttt tcaagtgaag gtttctgtca gttgaagtag ttagcaatgg cttcttttct 240
cccgtgtcca aagcaggctc ttcctgcgct gacttctgag gagngttca gtcctctgcc 300
atgtataggc gatacatcaa ggcgacggcc actgcagaga tggcagggat caccagttg 360
gtccaccaac tggaactaga atcaatagta gtgataagag tttccggagg cttgtttaac 420
tttggctgt catctggatg gagctcccca atgatgaat ttttggacat ttccttgcca 480
tctgtagant gcccgcacat ctcaaagtgc ttagtagcng tcacctccac ttgttccctt 540
aaaacttctt cccaccagg atgctcttcc agaaatttgg gncaaatcgn acaccttgtg 600
g 601

<210> 295
<211> 262
<212> DNA
<213> Homo sapien

<400> 295
cccttagccc caagggccct gggggcagcc accctcccgc ctgtcggccc gtagatttat 60
caaggggtgtt atgggcccag ctttgggggg ccagtcocga tgcactttga ggggtgttgg 120
agaggggact ccccccactcg cacttaactc aacggtcttc gggccctggg gctgttttta 180
ccatgtttgt ttttgaagct caggtgtctc acgtctgggc tgcaccaggc gaagagagaa 240
attaaagatt tgaggttttt cc 262

<210> 296
<211> 598
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(598)
<223> n = A,T,C or G

<400> 296
gttagaaciaa ctcagcaaaa taaaattcct gtttattgtt ggacaacatt gtttcacaca 60
tacatcaaac aggccaaaaa aaataaacag caacttcata gacaaaaaag gaaaaaaa 120
gaaacctttt atctttggcc tttttaacca tctcatacaa accaactact tatagtagag 180
ctaagtacat acacaaaaaa gttactggaa tgctcggaat aagattgttt ttctgttgctc 240
atthttgtctt tttttacaag gntttttttc tcttttgaga ttataatgaa catggnacaa 300
ccacaagtaa agtcagaagt aggacagana acgctccgaa ggctggtttg gtcacccgan 360
atcattaaaa atggctgacc ctaacaatat gtacaaaaat ataaaatgta aataaaaaat 420
acaaacaaat ttccttttta aagtactttt aagaaaaaaa gcagggcctt ggaggttttg 480
gttctttttt cctccctgt tgcaaatct catggttttg gttgggtggn gganancccg 540
tgcatctctg ggggtggcact gccccggngg gcggggcgggc ctctctctcg aangngac 598

<210> 297
<211> 509
<212> DNA
<213> Homo sapien

<400> 297
agaacacagg tgctgtgaaa actacccta aaagccaaaa tgggaaagga aaagactcat 60
atcaacattg tcgtcattgg acacgtagat tcgggcaagt ccaccactac tggccatctg 120
atctataaat gcggtggcat cgacaaaaga accattgaaa aatttgagaa ggaggctgct 180
gagatgggaa agggctcctt caagtatgcc tgggtcttgg ataaactgaa agctgagcgt 240
gaacgtggta tcaccattga tatctccttg tggaaatttg agaccagcaa gtactatgtg 300

actatcattg atgccccagg acacagagac tttatcaaaa acatgattac agggacatct	360
caggetgact gtgctgtcct gattgttgct gctgggtgtg gtgaatttga agctgggtatc	420
tccaagaatg ggcaggaccc gagagcatgc ctttctggct tacacactgg gtgtgaaaca	480
actaattgtc ggtgttaaca aaatggatt	509

<210> 298
 <211> 267
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(267)
 <223> n = A,T,C or G

<400> 298	
gggacggggg aaaggagacg cttcttctc ttgctgctct tctcgttccc gagatcagcg	60
gcggcggtga ccgcgagtgg gtcggcaccc tctccggctc cggngcnaa caatgctgac	120
tgatagcgga ggcggnggca cctccttnna ggaggacctg gactctgtgg ctccgcgatc	180
cgccccagct ggggcctcgg agccgcctcc gccgggaggg gtcgggtctgg ggatccncac	240
cgngaggctn tttggggagg gcggggcc	267

<210> 299
 <211> 121
 <212> DNA
 <213> Homo sapien

<400> 299	
ggcacgaggg ccctcggagc tcgtttccag atcgaggtaa gagggacttt cttaaaggcc	60
tagtctatgg gatggggcgg cggagggaat tttttgagaa ataaaatgaa gctgcagtgt	120
a	121

<210> 300
 <211> 533
 <212> DNA
 <213> Homo sapien

<400> 300	
aaggtgcaca gtatttgatg caggctgctg gtcttggtcg tatgaagcca aacacacttg	60
tccttggtgatt taagaaagat tggttgcaag cagatatgag ggatgtggat atgtatataa	120
acttattttca tgatgctttt gacatacaat atggagtagt ggttattcgc ctaaaagaag	180
gtctggatat atctcatctt caaggacaag aagaattatt gtcatcacia gagaaatctc	240
ctggcaccaa ggatgtggta gtaagtgtgg aatatagtaa aaagtccgat ttagatactt	300
ccaaaccact cagtgaataa ccaattacac acaaagtga ggaagaggat ggcaagactg	360
caactcaacc actgttgaaa aaagaatcca aaggccctat tgtgccttta aatgtagctg	420
accaaagct tcttgaagct agtacacagt ttcagaaaaa acaaggaaaag aatactattg	480
atgtctgggtg gctttttgat gatggagggt tgaccttatt gataccttac ctt	533

<210> 301
 <211> 560
 <212> DNA
 <213> Homo sapien

<220>

<221> misc_feature
 <222> (1)...(560)
 <223> n = A,T,C or G

<400> 301
 ataaatgata cctttttattg taagtaatgc gcaacactgg cctggctttg cactgcaagc 60
 cctcgggtcaa gatatagtca aataactatg gctgcaggtt ccacagttcc acaataacca 120
 tggctgcacg atccacaatt cagacacaga catagagctg ggggtgggtgg aagggggcagg 180
 aggggtggcag agtgcggact gtccccagcc ctggcctctc catgcanagt tggcccaggc 240
 agacacaccc catggaatga tgagaaagtg acggcacggc cccttcccac agcaagcctg 300
 gggctgccag gaactgccct tcanaacctt tgggcccagg tcnccttgaa nccccacaac 360
 tttttatctg gaataagtat taaaaaacia taaattaagc aaacaacntg gnccttgaag 420
 gatgttgacc nacatgggtc acagtttttg gcncaaaaaa ataagggctg gtttgctttt 480
 tttggaaggc aggggtttgtg gnttggtttt caaatnattt tcaaaccatt ccccagggag 540
 gganaacccc cggggggggaa 560

<210> 302
 <211> 599
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(599)
 <223> n = A,T,C or G

<400> 302
 gcaaagttac aaatattattg gtctggaaat aaatacaaat atctcattaa naaactcctc 60
 tggaaagact tgtgcacaat agtttcccat ccgtactcag cctctcttgc cccgatcccc 120
 gactttttcta ctcaaggcca gggaaaggcct ccaaggngat gggcggcagg taacgagtca 180
 ttgcctctca cgccacctgg aaggctggac tacttctctc tcccaactgc ggggtcccan 240
 aaatcctcgg gtcccagngg ctgacttaca atattcaatt cactctgacc aaacttccta 300
 tganaaaatc cacgngagc caaaatgaaa agtacaaggc agtagtacag gaacctggca 360
 gccgcaactg ccgcccanaa acgtcagtgg ngctgcccc ttcggcgaaa ggtagggag 420
 caggaaaaga ggaagcagga gagggaaagga aagtcccatg gaatatgtat tccanaatcc 480
 ttacattttc tcagccaccg ctccccacgt gagttccac cccacccccg acaagaagca 540
 aagagttctg aggatccaag aacgtgaccg ggtcanacan gttcagctac tgagttcac 599

<210> 303
 <211> 591
 <212> DNA
 <213> Homo sapien

<400> 303
 cggagttgta acgctccact gactgataga gcgaccggcc gaccatggcg cccggagtgg 60
 cccgcggggc gacgccgtac tggaggttgc gcctcgggtg cgccgcgctg ctctgctgc 120
 tcatcccggt ggccgcgcg caggagcctc ccggagctgc ttgttctcag aacacaaaca 180
 aaacctgtga agagtgcctg aagaacgtct cctgtctttg gtgcaacact aacaaggctt 240
 gtctggacta cccagttaca agcgtcttgc caccggcttc cctttgtaaa ttgagctctg 300
 cacgtggggg agtttgttgg gtgaactttg aggcgtgat catcaccatg tcggtagtctg 360
 ggggaaccct cctcctgggc attgccatct gctgctgctg ctgctgcagg aggaagagga 420
 gccggaagcc ggacaggagt gaggagaagg ccattgcgtg gcgggaggag aggcgggatac 480
 ggcaggagga acggagagca gagatgaaga caagacatga tgaaatcaga aaaaaatatg 540
 gcctgtttta agaagaaaac ccgtatgcta gatttgaaaa caactaaagc g 591

<210> 304
 <211> 441
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(441)
 <223> n = A,T,C or G

<400> 304
 gctggacgga gacctgctgg aggaggagga gctggaggaa gcagaggagg aggaccggtc 60
 gtcgctgctg ctgctgtcgc cgcccgcggc caccgcctct cagaccagc agatcccagg 120
 cgggtccctg ggggtctgtgc tgctgccagc cgccagggtc gatgcccggg aggcggcggc 180
 ggcggcgggg gtgctgtacg gaggggacga tgcccagggc atgatggcgg cgatgctgtc 240
 ccacgcctac ggccccggcg gttgtggggc ggcgggcgcc gccctgaacg gggagcaggc 300
 ggccctgctc cggagaaaaga gcgtcaacac caccgagtgc gtcccgggtc ccagctccga 360
 gcacgtcgcc gagatcgtcg gccgccaggg ttgtaaaatt aaagcactga nagccaagac 420
 aaacacgtat atcaagactc c 441

<210> 305
 <211> 491
 <212> DNA
 <213> Homo sapien

<400> 305
 tcgccaatgcc cccttcttag cactgcaccg ccagggtccat gctgctgcca cccagacct 60
 gggctttgcc tgccacctct gtgggcagag cttccgaggc tgggtggccc tggttctgca 120
 tctgcgggcc cattcagctg caaagcggcc catcgcttgt cccaaatgcg agagacgctt 180
 ctggcgacga aagcagcttc gagctcatct gcggcggtgc caccctcccg ccccgaggc 240
 ccggcccttc atatgcggca actgtggccg gagctttgcc cagtgggacc agctagtgtc 300
 ccacaagcgg gtgcacgtag ctgaggccct ggaggaggcc gcagccaagg ctctggggcc 360
 ccggccagcgg ggccggcccc cggtgaccgc cccccggccc ggtggagatg ccgtcgaccg 420
 ccccttccag tgtgcctgtt gtggcaagcg cttccggcac aagcccaact tgatcgctca 480
 cccgcgcgtg c 491

<210> 306
 <211> 547
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(547)
 <223> n = A,T,C or G

<400> 306
 tctcttttctt ttaagacagg aatgtaagcc acaacattta caaatacaat gttttaactc 60
 tctacatgta ggaagccaac ctgctccttt ttgatcttct tctttggcac aacctcagtg 120
 gattttctctg attcagaacg agttctaatt gatcttctct gttgcttctt ttctactgag 180
 cctgtagaac cagatgttgc ttcaggagat gatacactct gcgttggctt ttcatttctc 240
 tgggttgggtg tagaaattat aagcctgtct tgccccctga cacttatctt tgttttggtt 300
 ccaattccct ttgttgaata aacaaattga tcgataaatt tcccatcccc tgtagcattc 360

tgaagagcaa acacttggtc aattttcaca actggagaca tgttacactt ctgcaaatcc	420
aggctccctt tgtgcatccg taatggaagc tggttaaggat ttccttgctg ccgcagtttt	480
ccaggtatt ttaacaggcg gnggctcttc ctctttccgc acttggtgtc cgcctctggc	540
tatgtct	547

<210> 307
 <211> 571
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(571)
 <223> n = A,T,C or G

<400> 307	
cgctgcatgt gataatgtca tcatttattt ttaaattggtt ctaaattgca natttaagtt	60
gatttcaaat caaccctatt tttaaattac ttttaatagg aanaaatgaa gcaaggacat	120
acataatcta ctatatttga aggactcaaa caaatacatg tttggctgtg aattctgtac	180
tctcaccaaa acagagataa aaatccacct aaaatacact ttccttcatt tagtgcttgt	240
ggganaagggt caagtattgc actttaaatt tactttcatc taacatttgc cccaactttc	300
cccctgaatt cactatatgt ttccagcaaa catgatttta taaattttaa gtataaaagc	360
aactaggttt tctaattcaa ctttggaagg tttactttac tctacanagc tatttttgta	420
aaacggcata tttacttaca aaattganag ataggggcat ccagctgagg tacatttcct	480
cccttggcgt tgagtttctg gacttgggtc gggggcacag gcttgtgtga ctgccccgtg	540
gcccataca tggcctggac cccaggatgc g	571

<210> 308
 <211> 591
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(591)
 <223> n = A,T,C or G

<400> 308	
ctccttatgt gtctgcctac ttcattcttc ggcatttcct gcttatccaa gttcaccatt	60
tcaggtcacc actggatata agttgcctgt atataattat caggcatttc ctgcttatcc	120
aagttcacca tttcagggtca ccactggata tcagttgcct gtatataatt atcaggcatt	180
tcctgcttat ccaagttcac catttcaggt caccactgga tatcagttgc ctgtatataa	240
ttatcaggca tttcctgctt atccaagttc accatttcag gtcaccactg gatatcagtt	300
gctgtatat aattatcagg catttctctgc ttatccaagt tcaccatttc aggtcaccac	360
tgatatcag ttgcctgtat ataattatca ggcatttcct gcttatccaa gttcaccatt	420
tcaggtcacc actggatata agttgcctgt atataattat caggcatttc ctgcttatcc	480
aaattcagca gttcagggtca ccactggata tcagttccat gtatacaatt accagatgcc	540
accgcagtgc cctgttgggg gagcaaagga gaaatntgtg gaccgaagca t	591

<210> 309
 <211> 591
 <212> DNA
 <213> Homo sapien

<400>	309						60
agggggtgca	cgtactccca	actgtggctcg	cgtctcacc	ccttctgctg	ctctcgtggc		120
ccccctcgca	tggcgggcat	cctgtttgag	gatatcttcg	atgtgaagga	tattgacccg		180
gagggcaaga	agtttgaccg	aggtaagtaa	gtgtctcgac	tgcattgtga	gagtgaatct		240
ttcaagatgg	atctaattct	agatgtaaac	attcaaatct	accctgtaga	cttgggtgac		300
aagtctcggt	tggtcatagc	tagtactctg	tatgaagatg	gtaccctgga	tgatggtgaa		360
tacaacccca	ctgatgatag	gccttccagg	gctgaccagt	ttgagtatgt	aatgtatgga		420
aaagtgtaca	ggattgaggg	agatgaaact	tctactgaag	cagcaacacg	cctgctgaga		480
ttgagagctg	ctgagtggca	gtgctccaga	atcacgggat	ggggccttct	gtttcagctc		540
tgcgtacgtg	tcctatgggg	gcctgctcat	gaggctgcag	ggggatgcca	acaacctgca		591
tggattcgag	gtggactcca	gagtttatct	cctgatgaag	aagctagcct	t		

<213> Homo sapien

<400>	310					60
tgggtctcaag	cctgaagagg	ctccgcccac	aagctggccc	atgaagttag	caatgcctgt	120
ggcttcagtc	aattgtcttg	agactgtgaa	gaggctgaaa	gacaccttc	cgggtggaag	180
aaggagttca	ctgaaaactt	atcttaaact	gaccttccc	tttgagttag	tcttcattcc	240
tctcccatgt	gggaaccag	cctccgatgc	cccggggact	aggggaaaca	gttggaggtc	300
cgtgccgtcc	ccagcctgcc	acgggtgcga	ggacagccaa	gtcctgagtg	actcaagatg	360
cttcacttac	atggaagaaa	cttctaaaac	tctaccgagt	ggtttttgta	tatactaaag	420
ttctatttag	agcttttctg	ttttgggcaa	gttcgctgct	ccttctattt	gggcactttg	480
gtttttgtac	tgtcttttgt	gacggcattg	attgaacatt	ttttactagt	agtcttatga	488
ctttttgta						

<213> Homo sapien

<223> n = A, T, C or G

<400>	311					60
c ccgtttntg	nagcaaaaana	gggggaagat	ttatatggtag	aggcgacaaaa	cctaccgcagc	120
ctggtgatag	ctggttgtcc	aagatagaat	cttagttcaa	ctttaaat	t gcccacagaa	180
ccctctaagt	ccccttghta	atttaactgt	tagtcctaac	aggaacagct	ctttggacac	240
taggaaaaaaaa	ccttgtagag	agagtaaaaa	atttaacacc	catagtaggc	ctaaaagcag	300
ccaccaatta	agaaagcgtt	caagctcaac	acctactacc	t aaaaaatcc	caaacataata	360
actgaactcc	tacaccccaa	ttggaccaat	ctatcacccct	atagaagaac	taatgttagt	420
ataagtaaca	t gaaaacatt	ctcctccgca	taagcctgcg	tcagattaa	a actgaact	480
gacaattaac	agccaatat	ctacaatcaa	ccaacaagtc	attattacc	t cactgtcaa	540
cccaacacag	gc atgctcat	a aggaaaggt	t			600

<213> Homo sapien

```

<400> 312
gaacttgctg tgaaggaagc agaaactgat gaaataaaaa ttttgctgga agaaagcaga      60
gcccagcaga aggagacctt gaaatctctt cttgaacaag agacagaaaa tttgagaaca      120
gaaattagta aactcaacca aaagattcag gataataatg aaaattatca ggtgggctta      180
gcagagctaa gaactttaat gacaattgaa aaagatcagt gtatttccga gttaattagt      240
agacatgaag aagaatctaa tatacttaaa gctgaattaa acaaagtaac atctttgcat      300
aaccaagcat ttgaaataga aaaaaaccta aaagaacaaa taattgaact gcagagtaaa      360
ttggattcag aattgagtcg tcttgaaaga caaaaagatg aaaaaattac ccaacaagaa      420
gagaaatacg aagctattat ccagaacctt gagaaagaca gacaaaaatt ggtcagcagc      480
caggagcaag acagagaaca gttaattcag aagcttaatt gtgaaaaaga tgaagctatt      540
cagactgccc taaaagaatt taaattggag agagaagttg ttgagaaaga g              591

```

```

<210> 313
<211> 373
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(373)
<223> n = A,T,C or G

```

```

<400> 313
ttgattttta ttctgnattt tattactgaa atangttgtc ctantnatcc caccacaaa      60
taaaaatntn acccangccc ccnttttctt tncctnatnc cctnttccac cacaccatcc      120
cggaacaagt gctccaggat tccctgcccc ctggccattt tggagtgtgn ccattgggta      180
gcaatgtgga aaccaccaag gcctttgtgg anaaaatgga ggggggttgag ggagnccan      240
gaggggctna tttgagggcc tttgccactt gctcataggc gagctcnatc tcctcntnat      300
ctgnacangt ggaagcaaat tcttcccggg cgtnggnant gctnaagnac cgatgcactc      360
cccggaagggn ctn              373

```

```

<210> 314
<211> 591
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(591)
<223> n = A,T,C or G

```

```

<400> 314
cccgtgccgc cgccgcctcc tgggaagaga ggaagcggga gaggagccca cgtcgctgt      60
cacccaatat ctccagccgc gcagtcccga agagtgtgag atgttcgcct gcgccaagct      120
cgctgcacc cctctctga tccgagctgg atccagagtt gcatacagac caatttctgc      180
atcagtgtta tctcgaccag aggctagtag gactggagag ggctctacgg tatttaattg      240
ggcccagaat ggtgtgtctc agctaacca aaggaggttt cagaccagtg caatcagcag      300
agacattgat actgctgcca aatttattgg tgcaggtgct gcaacagtag gagtggctgg      360
ttctggtgct ggtattggaa cagtctttgg cagccttata attggttatg ccagaaacct      420
ttcgtgaag cagcagctgt tctcatatgc tatcctggga tttgccttgt ctgaagctat      480
gggtctcttt tgtttgatgg ttgctttctt gattttgttt gccatgtaac aaattactgc      540
ttgacatggt ggcattcata ttaattacng atgtaattct gtgtatctta c              591

```

```

<210> 315

```

<211> 591
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(591)
 <223> n = A,T,C or G

<400> 315						60
aagcccttca	ccaacaaaga	tgcctatact	tgtgcaaatt	gcagtgcctt	tgtccacaaa	120
ggctgccgag	aaagtctagc	ctcctgtgca	aaggtcaaaa	tgaagcagcc	caaagggagc	180
cttcaggcac	atgacacatc	atcactgccc	acggtcatta	tgagaaacaa	gccctcacag	240
cccaaggagc	gtcctcggtc	cgcagtcctc	ctgggtgatg	aaaccgctac	caccccaata	300
tttgccaata	gacgatccca	gcagagtgtc	tcgctctcca	aaagtgtctc	catacagaac	360
attactggag	ttggcaatga	tgagaacatg	tcaaacacct	ggaaattcct	gtctcattca	420
acagactcac	taaataaaaat	cagcaaggtc	aatgagtcaa	cagaatcact	tactgatgag	480
ggtacagaca	tgaatgaagg	acaactactg	ggagactttg	agattgagtc	caaacagctg	540
gaagcagagt	cttggagtcg	gataatagac	agcaagtttc	taaaacagcc	aaaagaaaga	591
tgtgggtcaa	acngcgagaa	gtaatatatg	agttggatgc	agacagagtt	t	

<210> 316
 <211> 591
 <212> DNA
 <213> Homo sapien

<400> 316						60
gtttttataa	gaataaaaatt	ccattcaagc	cagatgggtg	ttacattgaa	gaagttctaa	120
gtaaatggaa	aggagattat	gaaaaactgg	agcacaacca	cacttacatt	caatggcttt	180
tccccctgag	agaacaaggc	ttgaacttct	atgccaaaga	actaactaca	tatgaaattg	240
aggaattcaa	aaaaacaaaa	gaagcaatta	gaagattcct	cctggcttat	aaaatgatgc	300
tagaattttt	tggaataaaa	ctgactgata	aaactggaaa	tgttgctcgg	gctgttaact	360
ggcaggaaag	atttcagcat	ctgaatgagt	cccagcacaa	ctatttaaga	atcactcgta	420
ttcttaaaag	ccttgggtgag	cttggatatg	aaagttttta	atctcctctt	gtaaaattta	480
ttcttcatga	agctcttggtg	gagaatacta	ttcccaatat	taagcagagt	gctctagagt	540
attttgttta	tacaattaga	gacagaagag	aaaggagaaa	gctcctgcgg	ttcgcccaga	591
aacactacac	gccttcagag	aactttatct	ggggaccgcg	ctcgaaga	a	

<210> 317
 <211> 323
 <212> DNA
 <213> Homo sapien

<400> 317						60
ccaagctacg	gaagcaagtg	gaagagattt	ttaatttgaa	atttgctcaa	gctcttggac	120
tcaccgaggc	agtaaaagta	ccatatacctg	tgtttgaatc	aaaccgggag	ttcttctatg	180
tggaaggctt	gccagagggg	attcccttcc	gaagccctac	ctggtttgga	attccacgac	240
ttgaaaggat	cgtccacggg	agtaataaaa	tcaagttcgt	tgtaaaaaaa	cctgaactag	300
ttatttctta	cttgctctct	gggatggcta	gtaaaataaa	cactaaagct	ttgcagtcct	323
cctaaagacc	acgaagtcct	ggg				

<210> 318
 <211> 591
 <212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(591)

<223> n = A,T,C or G

<400> 318

gatggcgtag	ttggcttgga	gactggcgcg	gcgttcgtgt	ccgagttctc	tgcaggtcac	60
tagtttccc	gtagttcagc	tgcacatgaa	tagaacagca	atgagagcca	gtcagaagga	120
ctttgaaaat	tcaatgaatc	aagtgaaact	cttgaaaaag	gatccaggaa	acgaagtga	180
gctaaaactc	tacgcgctat	ataagcaggc	caactgaagga	ccttgtaaca	tgcccaaac	240
aggtgtat	gacttgatca	acaaggccaa	atgggacgca	tggaatgcc	ttggcagcct	300
gccaaggaa	gctgccaggc	agaactatgt	ggatttggtg	tccagtttga	gtccttcatt	360
ggaatcctct	agtcagggtg	agcctggaac	agacaggaaa	tcaactgggt	ttgaaactct	420
ggtggtgacc	tccgaagatg	gcatcacaaa	gatcatgttc	aaccggccca	aaaagaaaa	480
tgccataaac	actgagatgt	atcatgaaat	tatgcgtgca	cttaaagctg	ccagcaanga	540
tgactcaatc	atcacttggt	ttaacaggaa	atggtgacta	ttacagtagn	g	591

<210> 319

<211> 591

<212> DNA

<213> Homo sapien

<400> 319

gaattcggca	cgaggttgct	gctaagcgaa	cgcccttttg	agcttacgga	ggccttctga	60
aagacttcac	tgctactgac	ttgtctgaat	ttgctgcca	ggctgccttg	tctgctggca	120
aagtctcacc	tgaacaggtt	gacagtgtga	ttatgggcaa	tgctctgcag	agttcttcag	180
atgctatata	tttggaagg	catgttggtt	tgctgtggg	aatcccaaa	gagacccag	240
ctctcacgat	taataggctc	tgtggttctg	gttttcagtc	cattgtgaat	ggatgtcagg	300
aaatttgtgt	taaagaagct	gaagtgtttt	tatgtggagg	aaccgaaagc	atgagccaag	360
ctccctactg	tgtcagaaat	gtgcgttttg	gaaccaagct	tggatcagat	atcaagctgg	420
aagattcttt	atgggtatca	ttaacagatc	agcatgtcca	gctcccatg	gcaatgactg	480
cagagaatct	tgctgtaaaa	cacaaaaata	gcagagaaga	atgtgacaaa	tatgccctgc	540
agtcacagca	gagatggaaa	gctgctaagt	atgctggcta	ctttaatgat	g	591

<210> 320

<211> 591

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(591)

<223> n = A,T,C or G

<400> 320

ggctccggcg	tctgcagggg	tcgccgagct	aaccggtggc	taggcgagtg	gggcggggcg	60
gccggcacca	tgctcaggca	ggcgaaccgt	ggcacccaga	gcaagaaaat	gagctctgag	120
ctcttcaccc	tgacctatgg	tgccctggtc	acccagctat	gtaaggacta	tgaaaatgat	180
gaagatgtga	ataaacagct	ggacaaaatg	ggctttaaca	ttggagtcgg	gctgattgaa	240
gatttcttgg	ctcgggtcaa	tggtgggagg	tgccatgact	ttcgggaaac	tgccgatgtc	300
attgccaaag	tgccgttcaa	gatgtacttg	ggcatcactc	caagcattac	taattggagc	360
ccagctggtg	atgaattctc	cctcattttg	gaaaataaac	ccttggtgga	ctttgtggaa	420

```

cttcctgata accactcatc ccttatttat tccaatctct tgtgtggggt gttgcgggga 480
gctttggaga tggccagat ggctngngga ggcccaagtt tgtccaggac accctnaaag 540
gagacgggng tgacagaaat ccggatgaga ttcacaggc ggattganga c 591

```

```

<210> 321
<211> 260
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(260)
<223> n = A,T,C or G

```

```

<400> 321
ctgcttggt ccacacgtgg gcgcgctag gtattccgac cggtaattcc tcctattggt 60
gtgcagcagc cacattgaag gatagagtgg cagcagaggc caaggatcgt gagttgatgg 120
agtttgctgc tgaataatgaa gggaagtctg ggggaggtct ccacagcgta gctgaggggg 180
tgcggtctaa tccagagcct ggcaggaggg gagtaaggga cttagcaggg gcggaggagt 240
tctgcggngg anaggagggg 260

```

```

<210> 322
<211> 559
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(559)
<223> n = A,T,C or G

```

```

<400> 322
ttccacatga catggagtgt gaagctggat gagcacatca ttccactggg aagcatggca 60
nttaacagca tctcaaaact gactnanctc acccagtctt ccatgtattc acttcctaact 120
gcacccactc tggcanacct gnaggacnat acacatgaag ncantgatga tcagccagan 180
aanccctact ttgactctcg canngtgata tttgagctgg attcatgcaa tggnagtggg 240
aaagtttgcc ttgtctacaa aagtgggaaa ccagnattag cagaanacac tgagatctgg 300
ttcctgnaca nancgttata ctggcatttt ctccacanaca cctttactgc ctattaccgc 360
ctgctcatca cccacctggg cctgccccag tggcaatatg ccttcccagc tatggcatta 420
gccacaggc caagcaatgg ttcagcatgt ataaacctat cacctacaac acaaacctgc 480
tcacagaaga naccgactcc tttgtgaata agctagatcc canctnagtg ttttaagagca 540
agaacaagat cgttatccc 559

```

```

<210> 323
<211> 492
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(492)
<223> n = A,T,C or G

```

```

<400> 323

```

```
<210> 324
<211> 474
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(474)
<223> n = A,T,C or G
```

<400>	324					60
aatttcagca	acatacttct	caatttcttc	aggatttaaa	atcttgaggg	attgatctcg	120
cctcatgaca	gcaagttcaa	tgtttttgcc	acctgactga	accacttcca	ggagtgcctt	180
gatcaccagc	ttaatggtca	natcatctgt	ttcaatggct	tcgtcagtat	agttcttctc	240
cagnaactca	cgcactgact	tggcaccocg	gcctatggca	ttggccttcc	aggcatggta	300
tgtgcccgag	gggtcagtct	gatagagcct	aggagtggca	tcaaagtcga	aaccacgat	360
gagggcagag	atgccaaacg	gcctgcgccc	attgctctgc	gtataacgct	gcttcanact	420
ggcgatgtag	cgggtgatgt	actccacagt	gaccgggtcc	tccacagtca	gccggtggct	474
ctggcactcc	accggggccc	tgttgatgac	tatccttgca	tcggcggtga	ggcc	

```
<210> 325
<211> 532
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(532)
<223> n = A,T,C or G
```

<400>	325					60
gaggagacag	gacagagcgt	ctggagagggc	aggaggacac	cgagttcccc	gtgttggcct	120
ccaggtcctg	tgcttgcgga	gccgtccggc	ggctgggatc	gagccccgac	aatgggcaac	180
gcgcaggagc	ggccgtcaga	gactatcgac	cgcgagcgga	aacgcctggt	cgagacgctg	240
caggcggact	cgggactgct	gttggacgcg	ctgctggcgc	ggggcgtgct	caccgggcca	300
gagtacgagg	cattggatgc	actgcctgat	gccgagcgca	gggtgcgccg	cctactgctg	360
ctggtgcagg	gcaagggcga	ggccgcctgc	caggagctgc	tacgtctgtc	ccagcgtaac	420
gcgggcgcgc	cggaccccg	ttgggactgg	cagcacgtgg	gtccgggcta	ccgggaccgc	480
agctatgacc	ctccatgcc	aggccactgg	acgccggagg	cacccggtc	ggggaccaca	532
tgccccgggt	tgcccagact	tcagaccctg	acgaggncgg	gggccctgag	gg	

<210>	326
<211>	322
<212>	DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(322)

<223> n = A,T,C or G

<400> 326							60
caaaattaac	atTTTTatta	aatcaagtta	aaaaaaatgt	tcagtgtana	aaagtcaaca		120
agggttttaa	caaaaccaa	atataccttt	ttatacaata	tatgtatata	ttagcagcaa		180
actacttctg	anattctctt	tcttttatgt	tcttctagtt	attttaaaga	aagcataaac		240
aatgtatatt	agtatggaat	gtcagcaa	ccactcttag	tcctttattc	tgtgatttgg		300
gccttctaca	aaatactttg	tgattctcac	taatgaatat	taagaacata	cccaatttta		322
actaaaaagt	agtgaacag	tg					

<210> 327

<211> 387

<212> DNA

<213> Homo sapien

<400> 327							60
aaaaccgtgt	actattagcc	atgggtcaacc	ccaccgtgtt	cttcgacatt	gccgtcgacg		120
gcgagccctt	gggcccgtc	tcctttgagc	tgtttgcaga	caaggtccca	aagacagcag		180
aaaattttcg	tgctctgagc	actggagaga	aaggatttgg	ttataaggg	tcctgctttc		240
acagaattat	tccagggttt	atgtgtcagg	gtggtgactt	cacacgccat	aatggcactg		300
gtggcaagtc	catctatggg	gagaaatttg	aagatgagaa	cttcataccta	aagcatacgg		360
gtcctggcat	cttgtccatg	gcaaatgctg	gacccaacac	aaatggttcc	cagtttttca		387
tctgcactgc	caagactgag	tggttgg					

<210> 328

<211> 502

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(502)

<223> n = A,T,C or G

<400> 328							60
agcagcccgg	cgcgccggcc	gcgcggcg	gcggcaaggc	tccgggccag	catgggggct		120
tcgtggtgac	tgtcaagcaa	gagcgcgcg	agggtccacg	cgcgggcgag	aaggggtccc		180
acgaggagga	gccggtgaag	aaacgcggct	ggcccaagg	caagaagcgg	aagaagattc		240
tgccgaatgg	gcccgaaggca	ccggtcacgg	gctacgtg	cttcctgaac	gagcggcgcg		300
agcagatccg	cacgcgccac	ccggatctgc	cctttcccga	gatcaccaag	atgctggg		360
ccgagtggag	caagctgcag	ccaacggaaa	agcagcggt	cctggatgag	gccnagagag		420
agaagcagca	gtacatgaag	gagctgcggg	cgtaccagca	gtctgaagcc	tataagatgt		480
gcacggagaa	gatccaggag	aagaagatca	agaaagaaga	ctcgagctct	gggctcatga		502
acactcttct	gaatggacac	aa					

<210> 329

<211> 463

<212> DNA

<213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(463)
 <223> n = A,T,C or G

<400> 329						60
caagttgcac	attttaattt	acaattttta	ccaataaaaa	ggattagttt	acaaaaaggg	120
aagtocttta	tacaaaataa	ggacaatttg	taaaganaat	ccactgtcat	gttttgctt	180
gtcaagtcaa	aactcaaata	gcttgttttg	gtaaaattat	tccagaaaca	taatccagac	240
aaaatcaata	acgtcatcag	cttcctaacc	atgtttaana	ggaataactt	catgaacatt	300
ttgccctgaa	ctgaanagtt	ctaaataactt	gtaaaccttt	aggaaaaaat	gactgctcgc	360
aggcagcttg	actggttaaga	gggtacacca	nagactccgg	gtcactcact	gtcagaatat	420
tcttatacat	acaatgagtc	tccaagcctg	tacaatgagt	gtcgtgcaac	ataattggag	463
taatggcctc	taaaatttta	caagtaaaact	ttattgnggc	ccc		

<210> 330
 <211> 500
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(500)
 <223> n = A,T,C or G

<400> 330						60
taattataga	tctacaaaat	atgaaatgta	ttccaagaat	gcagaaaaac	catctagaag	120
caaaaggact	ataaaaacaaa	aacagagagaag	aaaattcatg	gctaaaccag	ctgaagaaca	180
gcttgatgtg	ggacagtcta	aagatgaaaa	catacataca	tcacatatta	cccaagacga	240
atttcaaaga	aattcagaca	gaaatatgga	agagcatgaa	gagatgggaa	atgatttgtt	300
ttccaaaaaa	acagatgccca	cctgtgggaa	gcaagaaaaag	tagcactaga	aaagataagg	360
aagaatctaa	aaagaagcgc	ttttccagt	agtccaagaa	caaacttgtn	cctgaagaag	420
tgacttcaac	tgtcacgaaa	agtcgaanaa	tttccangcg	tccatctgat	tggtgggtgg	480
taaaancaga	ggagagtcct	gtttatagca	attcttcagt	aagaaatgaa	ttaccaantg	500
catcacatn	ntgcccggaa					

<210> 331
 <211> 494
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(494)
 <223> n = A,T,C or G

<400> 331						60
tctctctctc	tctcaaaatt	acagtgttca	ttgtcattga	cctcagcagc	aaatttgact	120
tgaattcact	taggatcgca	ggaatcaggg	gaaagtgatt	ttaaagggtg	tttctccagc	180
acattttaag	aaaagggacc	aaaagttatt	ttagcttctt	caatagattg	catgttgctt	240
attaggataa	taaattaata	ttaaattgcaa	tatatgtctt	gnctttatta	tgcatcttat	300
ttaggagttg	ttcaaatcac	tgcagtaggg	ctctgcaa	aaaataatgn	aacctattat	360
catggatcta	atgnactgna	actttatcag	tgaagggnaa	aatctcaaat	aacaagtaca	

aacattggac aattacctat aaagatttgt aaaaggaaaa tttttccata gatttcattc 420
 ttggcatttt gtaaaagacga ccctgcagnc ccctgtttgn aactttttta ataaaataga 480
 catctgttta ctg 494

<210> 332
 <211> 538
 <212> DNA
 <213> Homo sapien

<400> 332
 aaagaacaaa tggaacgcga tgggtgttct gaacaagagt ctcaaccgtg tgcatttatt 60
 gggataggaa atagtgaacca agaaatgcag cagctaaact tggaaggaaa gaactattgc 120
 acagccaaaa cattgtatat atctgactca gacaagcgaa agcacttcat gttgtctgta 180
 aagatgttct atggcaacag tgatgacatt ggtgtgttcc tcagcaagcg gataaaagtc 240
 atctccaaac cttccaaaaa gaagcagtca ttgaaaaatg ctgacttatg cattgcctca 300
 ggaacaaaagg tggctctgtt taatcgacta cgatcccaga cagttagtac cagatacttg 360
 catgtagaag gaggtaatth tcatgccagt tcacagcagt ggggagcctt ttttattcat 420
 ctcttgatg atgatgaatc agaaggagaa gaattcacag tccgagatgg ctacatccat 480
 tatggacaaa cagtcaaaact tgtgtgtctca gttactggca tggcactccc aagattga 538

<210> 333
 <211> 499
 <212> DNA
 <213> Homo sapien

<400> 333
 ctcagcctgc gggactgtct ggctcggcctt ctaggcgggtt ttgatgaaca cctggcttta 60
 ttcttgcaat gaagaaagggt tctcaacaaa aaatattctc caaagcaaag ataccatcat 120
 catctcactc tcttatccca tcatctatgt ccaatatgag atctaggtca ctttcacctt 180
 tgattggatc agagactcta ccttttcatt ctggaggaca gtggtgtgag caagttgaga 240
 ttgcagatga aaacaatatg ctttttgact atcaagacca taaaggagct gattcacatg 300
 caggagttag atatattaca gaggccctca ttaaaaaact tactaaacag gataatttgg 360
 ctttgataaa atctctgaac ctttcacttt ctaaagacgg tggcaagaaa tttaagtata 420
 ttgagaattt ggaaaaatgt gttaaacttg aagtactgaa tctcagctat aatctaatag 480
 ggaagattga aaagtcgga 499

<210> 334
 <211> 561
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(561)
 <223> n = A,T,C or G

<400> 334
 ttcccggtag ttcagctgca catgaataga acagcaatga gagccagtca gaaggacttt 60
 gaaaattcaa tgaatcaagt gaaactcttg aaaaaggatc caggaaacga agtgaagcta 120
 aaactctacg cgctatataa gcaggccact gaaggacctt gtaacatgcc caaaccaggt 180
 gtatttgact tgatcaacaa ggccaaatgg gacgcattga atgcccttgg cagcctgccc 240
 aaggaagctg ccaggcagaa ctatgtggat ttggtgtcca gtttgagtcc ttcattggaa 300
 tctcttagtc aggtggagcc tggaacagac aggaaatcaa ctggggttga aactctggtg 360
 gtgacctccg aagatggcat cacaagatc atgttcaacc cggcccaaaa agaaaaatgc 420

480
540
561

```
<210> 335
<211> 551
<212> DNA
<213> Homo sapien
```

<400> 335						60
aagctggtca	tggtgggga	gaccaccaac	tccgcgggc	agcggtgcc	ccagaagga	120
gacgtggaga	tgctgtgcg	cgggcgcgc	tgccagggt	tcagcgcat	gaaccgcttc	180
aattcgcgca	cctactcaa	gttcaaaaac	tctctggtg	tttcttctt	cagctactgc	240
gactactacc	ggcccgggt	cttctcctg	gagaatgtca	ggaactttgt	ctccttcaag	300
cgctccatgg	tctgaagct	cacctccgc	tgctggtcc	gcatgggcta	tcagtgcacc	360
ttcggcgctg	tgcaggccg	tcagtacgc	gtggcccaga	ctaggaggcg	ggccatcatc	420
ctggccgcgc	cccctggaga	gaagctccct	ctgttcccgg	agccactgca	cgtgtttgct	480
ccccggcgct	gccagctgag	cgtggtggt	ggatgacaag	aagtttgta	gcaacataac	540
caggttgagc	tcggtcctt	tccggaccat	acggtgcgag	aaacgatgtc	cgacctgccg	551
gaagtgcgga	a					

```
<210> 336
<211> 540
<212> DNA
<213> Homo sapien
```

```
<220>  
<221> misc_feature  
<222> (1)...(540)  
<223> n = A,T,C or G
```

<400>	336					60
agggtctatgt	ctactgaagg	caataaacga	ggaatgatcc	agcttattgt	tgcaaggaga	120
ataagcaagt	gcaatgagct	gaagtcacct	gggagcccc	ctggacctga	gctgccatt	180
gaaacagcgt	tggatgatg	agaacgaaga	atttccatt	ccctctacag	tgggattgag	240
gggcttgatg	aatcgcccag	cagaaatgct	gccctcagta	ggataatggg	taaataccag	300
ctgtccccta	cagtgaatat	gccccaaagt	gacactgtca	ttatagaaga	tgacaggttg	360
ccagtgcttc	ctccacatct	ctctgaccag	tctctctcca	gctcccatga	tgatgtgggg	420
tttgtgacgg	cagatgctgg	tacttgggcc	aaggctgcaa	tcagtgattc	agccgactgc	480
tctttgagtc	cagatgttga	tccagttctt	gcttttcaac	gaaaaaggat	ttggacgtca	540
gaagtatgtc	agaaaaacgc	accaaagcaa	ttttcanatg	ccagtcaatt	ggatttcgtt	

```
<210> 337
<211> 422
<212> DNA
<213> Homo sapien
```

```
<220>  
<221> misc_feature  
<222> (1)...(422)  
<223> n = A,T,C or G
```

<400> 337
gcagcaggaa cagttacagc agcagcagca acagcagctg ttgcaacagc agcaggaaca 60

```

attgcagcag caacaactgc agcctcctcc cctggagccc gaggaggagg aagaggtgga 120
gctggagctc atgccggtgg acctgggggtc agagcaggag ctggagcagc agcggcagga 180
gttggagcgg cagcaggagc tggaaacggca gcaggagcag cggcagctgc agctcaaact 240
gcaggaggag ctgcagcagc tggagcaaca gctggagcag cagcagcagc agctggagca 300
gcaggagggtg cagctggagc tgaccccggt ggagctaggc gccagcagc aggaggtgca 360
gctggagctg acccccgtgc agccggagct gcagctggaa ctggtgccan cccagggggc 420
gg

```

```

<210> 338
<211> 601
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(601)
<223> n = A,T,C or G

```

```

<400> 338
catcttacga acgtcttatg atgtcttatg agcgggtctat gatgtcccct atggctgaac 60
gctctatgat gtcagcctac gagcgctcta tgatgtcagc ctacgagcgc tctatgatgt 120
ccccatggc tgagcgctct atgatgtcag cttatgaacg ctccatgatg tcagcttatg 180
aacgctccat gatgtcccca atggctgacg gatctatgat gtccatgggt gctgaccggt 240
ctatgatgtc gtcatactct gctgctgacc ggtctatgat gtcacgtac tctgcagctg 300
accgatctat gatgtcatct tatactgctg atcgttcaat gatgtctatg gctgctgatt 360
cttacaccga ttcttacact gacacatata cagaggcata tatggtgcc a ctttgcctc 420
ctgaagagcc cccaacaatg ccaccgttgc cacctgagga gccaccaatg acaccaccat 480
tgctnctga ggaaccaccc agagggtcca gcattgccca cttgagcagt cagcattaac 540
cagcttgaaa atacttggcc ctacanangg tgccatcatt accatctgaa gagctgtatc 600
g

```

```

<210> 339
<211> 440
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(440)
<223> n = A,T,C or G

```

```

<400> 339
agagggagga ggcccaactg gtgatgctgc tgetgctgct gctgcggccg ccgcccctc 60
tattgctgat actctagtgg ggctggaagg gtggttccta ttcgcaccat cgccaaccag 120
agacagaggg aaaaaaaaaa ccggcagcca ctgctgatgt tgggttcgga ggctgcatcc 180
gactcgggtca caaggaaaat ggattcagtt tgcattcttc cctcctttaa acagcttctc 240
cgggtctcag catggtatca aagcttgaaa gagagaagac tcaagaagcg aagaggattc 300
gtgagctgga gcagcgcaag cacacggtgc tggtagacaga actcaaagcc aagctccatg 360
aggagaagat gaaggagctg caggctgtga gggagaacct tatcaagcag cacgacagga 420
aatgtcaang acggtgaagg

```

```

<210> 340
<211> 450
<212> DNA

```

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(450)

<223> n = A,T,C or G

<400> 340						60
gatttccagg	ggcggatatt	gagtgtcgac	ccagaggaag	aaagggagga	gggcccgcct	120
aggattcctc	aggccgacca	gtggaagtct	tcaaacaaga	gcctggtgga	ggctctgggg	180
ctggaagccg	agggtgcagt	tcctgagaca	cagactttga	ccggtatggag	taaggggttc	240
attggcatgc	acagggaaat	gcaagtcaac	cccatttcaa	agcggatggg	gcccattgact	300
gtggtcagga	tggacgcttc	agtccagcca	ggcccttttc	ggaccctgct	ccagtttctt	360
tatacgggac	aactggatga	aaaggaaaag	gatttggtgg	gcctggctca	gatcgagag	420
gtcctcgaga	tggtcgattt	gaggatgatg	gtggaaaaca	tcataaaca	ggaagccttc	450
atgaaccagg	agattacgaa	nnctttcac				

<210> 341

<211> 451

<212> DNA

<213> Homo sapien

<400> 341						60
aacagctatt	aaaacagaaa	atggatgaac	ttcataagaa	gttgcatcag	gtggtggaga	120
catcccatga	ggatctgccc	gcttcccagg	aaaggtccga	ggttaatcca	gcacgatgg	180
ggccaagtgt	aggctcccag	caggaactga	gagcgccatg	tcttccagta	acctatcagc	240
agacaccagt	gaacatggaa	aagaacccaa	gagaggcacc	tcctgttgtt	cctcctttgg	300
caaatgctat	ttctgcagct	ttggtgtccc	cagccaccag	ccagagcatt	gctcctcctg	360
ttcctttgaa	agcccagaca	gtaacagact	ccatgtttgc	agtggccagc	aaagatgctg	420
gatgtgtgaa	taagagtact	catgaattca	agccacagag	tggagcagag	atcaaagaag	451
ggtgtgaaac	acataagggt	gccaacacaa	g			

<210> 342

<211> 498

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(498)

<223> n = A,T,C or G

<400> 342						60
ctcaagcagg	ctattgaaga	ggaaggaggc	gatccagata	atattgaatt	aactgtttca	120
actgatactc	caaacaagaa	accaactaaa	ggcaaaggta	aaaaacatga	agcagatgag	180
ttgagtggag	atgcttctgt	gggaagatga	tgcttttata	aaggactgtg	aattggagaa	240
tcaagaggca	catgagcaag	atggaaatga	tgaactaaag	gactctgaag	aatttgggtga	300
aaatgaagaa	gaaaatgtgc	attccaagga	gttactctct	gcagaagaaa	acaagagagc	360
tcatgaatta	atagaggcag	aaggaataga	agatatagaa	aaagaggaca	tcgaaagtca	420
ggaaattgaa	gctcaagaag	gtgaagatga	tacctttcta	acagcccaag	atggtgagga	480
agaagaaaat	gagaaagata	tagcagggtt	ctggtgatgg	cncacaagaa	gtatntaaac	498
ctcttccttc	aaaaaggg					

<210> 343

<211> 491
 <212> DNA
 <213> Homo sapien

<400> 343
 ccgaccccta ctggcgggcg caactccaca accagtacgg ccccatgaat atgaacatgg 60
 gtatgaacat ggcagcagcc gcggcccacc accaccacca ccaccaccac caccocgggtg 120
 cctttttccg ctatatgcgg cagcagtgca tcaagcagga gctaattctgc aagtggatcg 180
 accccgagca actgagcaat cccaagaaga gctgcaacaa aactttcagc accatgcacg 240
 agctgggtgac acacgtctcg gtggagcacg tcggcgggccc ggagcagagc aaccacgtct 300
 gcttctggga ggagtgtccg cgcgagggca agcccttcaa ggccaaatac aaactgggtca 360
 accacatccg cgtgcacaca ggcgagaaac ccttccctgc cttccgggt gtggcaaaagt 420
 cttcgcgcg ctcgagaacc tcaagatcca caaaaggacc acacagggga gaagccgtcc 480
 agtggagttg a 491

<210> 344
 <211> 412
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(412)
 <223> n = A,T,C or G

<400> 344
 gtgcgctgtc ttcccgttg cgtcaggagc ctgcccgact cagtggccgc catggcatca 60
 gatgaaggca aactttttgt tggagggctg agttttgaca ccaatgagca gtcgctggag 120
 caggtcttct caaagtacgg acagatctct gaagtgggtg ttgtgaaaga caggagagacc 180
 cagagatctc ggggatttgg gtttgcacc tttgagaaca ttgacgacgc taaggatgcc 240
 atgatggcca tgaatgggaa gtctgtagat ggacggcaga tccgagtaga ccaggcagggc 300
 aagtcgtcan acaaccgatc ccgtgggtac cgtggtggct ctgccggggg ccggggcttc 360
 ttccgtgggg gcccgangac ggggcccgtg ggttctctaa aagaagaggg ga 412

<210> 345
 <211> 498
 <212> DNA
 <213> Homo sapien

<400> 345
 aactagtctc gggccatcct ttctgcgcac ccggtgtcgc tgggctgcac cccgggaggg 60
 gacgtccgcc gggcacggga gggggccaag atgccgatca ataaatcaga gaagccagaa 120
 agctgcgata atgtgaagg tgttgtagg tgccggcccc tcaatgagag agagaaatca 180
 atgtgctaca aacaggctgt cagtgtggat gagatgaggg gaactatcac tgtacataag 240
 actgattctt ccaatgaacc tccaaagaca tttacttttg atactgtttt tggaccagag 300
 agtaaacac ttgatgttta taacttaact gcaagaccta ttattgattc tgtacttgaa 360
 ggctacaatg ggactatttt tgcataatgaa caaaccggaa caggcaaaac ttttaccatg 420
 gaaagtggtc gagctattcc tgaacttaga ggaataattc cccaatttct ttgctcacia 480
 tatttgggcc atatttgc 491

<210> 346
 <211> 427
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(427)
 <223> n = A,T,C or G

<400> 346
 agatggcggg cgccgtgaga actttgcagg aacagctgga aaaggccaaa gagagtctta 60
 agaacgtgga tgagaacatt cgcaagctca ccgggcggga tccgaatgac gtgaggccca 120
 tccaagccag attgctggcc ctttctgggc ctggtggagg tagaggacgt ggtagtttat 180
 tactgaggcg tggattctca gatagtggag gaggaccccc agccaaacag agagaccttg 240
 aaggggcagt cagtaggctg ggcgggggagc gtcggaccag aagagaatca cgccaggaaa 300
 gcgacccgga ggatgatgat gttaaaaagc cagcattgca gtcttcantt gtagctacct 360
 cccaaagagc gccccacgta gagaccttat ccagggatca aaattttgga tgaaaaaggg 420
 gaaagcc 427

<210> 347
 <211> 280
 <212> DNA
 <213> Homo sapien

<400> 347
 cacagaaagt tctccgctcc cagacatggg tccctcggtt tcctgcctcg gaagcgcagc 60
 agcaggcatc gtgggaaggt gaagagcttc cctaaggatg acccgctcaa gccgggtccac 120
 ctcacagcct tcttgggata caaggctggc atgactcaca tcgtgcggga agtcgacagg 180
 ccgggatcca aggtgaacaa gaaggaggtg gtggaggctg tgaccattgt agagacacca 240
 cccatggtgg ttgtgggcat tgtgggctac gtggaaaccc 280

<210> 348
 <211> 411
 <212> DNA
 <213> Homo sapien

<400> 348
 caactatgat gtgcctgaaa aatgggcacg attctatact gcagaagtag ttcttgcatt 60
 ggatgcaatc cattccatgg gttttattca cagagatgtg aagcctgata acatgctgct 120
 ggataaatct ggacatttga agtttagcaga ttttggtagt tgtatgaaga tgaataagga 180
 aggcattgga cgatgtgata cagcgggttg aacacctgat tatatttccc ctgaagtatt 240
 aaaatcccaa ggtggtgatg gttattatgg aagagaatgt gactggtggt cggttggggg 300
 atttttatata gaaatgcttg taggtgatac acctttttat gcagattctt tggttgggaa 360
 ttacagtaaa attatgaacc attaaaaatt cacttacctt tcctgatgat a 411

<210> 349
 <211> 408
 <212> DNA
 <213> Homo sapien

<400> 349
 gatgggcacg tctcgggaca actggcacaa gcgcgcgcaa accgggggca agagaaagcc 60
 ctaccacaag aagcggaagt atgagttggg gcgcccagct gccaacacca agattggccc 120
 ccgcgcgcatc cacacagctc gtgtgcgggg aggtacaag aaataaccgtg ccctgaggtt 180
 ggacgtgggg aatttctcct ggggctcaga gtgttgtagt cgtaaaacaa ggatcatcga 240
 tgttgtctac aatgcatcta ataacgagct ggttcgtacc aagaccctgg tgaagaattg 300
 catcgtgctc atcgacagca caccgtaccg acagtggtag gagtccact atgcgctgcc 360

cctgggccgc aagaaggag ccaaactgac ttctgaggaa gaagaaaa

408

<210> 350
<211> 409
<212> DNA
<213> Homo sapien

<400> 350
ggttccccc gctctgggta cccggctctg catcgctcg ccatgatggg ccatcgtcca 60
gtgctcgtgc tcagccagaa cacaaagcgt gaatccggaa gaaaagttca atctggaaac 120
atcaatgctg ccaagactat tgcagatata atccgaacat gtttgggacc caagtccatg 180
atgaagatgc ttttggaccc aatgggagggc attgtgatga ccaatgatgg caatgccatt 240
cttcgagaga ttcaagtcca gcatccagcg gccaaagtcca tgatcgaaat tagccggacc 300
caggatgaag aggttggaga tgggaccaca tcagtaatta ttcttgaggg ggaaatgctg 360
tctgtagctg agcacttctt ggagcagcag atgcacccaa cagggtgggg 409

<210> 351
<211> 226
<212> DNA
<213> Homo sapien

<400> 351
aatcccaaac atataactga actcctcaca cccaattgga ccaatctatc accctataga 60
agaactaatg ttagtataag taacatgaaa acattctctt ccgcataagc ctgcgtcaga 120
ttaaaacact gaactgacaa ttaacagccc aatatctaca atcaaccaac aagtcattat 180
taccctcact gtcaacccaa cacaggcatg ctcataagga aaggtt 226

<210> 352
<211> 410
<212> DNA
<213> Homo sapien

<400> 352
gcggagggggc tggctgggca ggagggggtg gcgggggcagc agggccgcgg ccatggggag 60
cttgaaggag gagctgctca aagccatctg gcacgccttc accgcactcg accaggacca 120
cagcggcaag gtctccaagt cccagctcaa ggtcctttcc cataacctgt gcacgggtgct 180
gaaggttcct catgaccagc ttgcccttga agagcacttc agggatgatg atgaggggtcc 240
agtgtccaac cagggctaca tgccttattt aaacagggtc attttggaaa aggtccaaga 300
caactttgac aagattgaat tcaataggat gtgttggacc ctctgtgtca aaaaaaacct 360
cacaaagaat cccctgctca ttacagaaga agatgcattt aaaatatggg 410

<210> 353
<211> 380
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(380)
<223> n = A,T,C or G

<400> 353
gagtttattt agaaagtatc atagtgtaaa caaacaatt gtaccacttt gattttcttg 60
gaatacaaga ctgctgatgc aaagctgaag ttgtgtgtac aagactcttg acagttgtgc 120

ttctctagga	ggntgggttt	ttttaaaaa	agaattatct	gngaaccata	cgtgattaat	180
aaagatttcc	tttaaggcan	aggctggtcn	agatgctgct	gttatcttct	gcctcagaca	240
gacagtataa	gnggtcttgt	ttctaagatt	cctaccacca	gttactttgg	gccaagtatc	300
cacatcccct	tgcgtatggg	aggnggggtga	anagtgttgg	atgcaaagng	gttattatgg	360
gaagnagctc	natggtaaaa					380

<210> 354
 <211> 379
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(379)
 <223> n = A,T,C or G

<400> 354						60
caacacatct	ttattaaaca	cctgaagtta	ctgggaggag	gccatgatgc	tggacacact	120
gtcaaagtca	atcttctcca	caatgttctt	gggtttaatg	ctctcttctt	ggctacagan	180
gaanatctgc	cccgaactngt	cggcactcca	gccgtatttg	ctcatccaca	cctttagctg	240
gctgtccgac	aganccccga	gcatntcggc	cagcagccan	cggncaatgt	gctggtaagt	300
gatacccaca	acatggcaga	taaactttcg	gacanagtct	tcaaagccag	ttataccttc	360
caagagggtcc	atgttttcat	ccagggcttg	ccanaagcct	ggaaatggca	ggtctccaac	379
aggtccccc	ggtacaaaa					

<210> 355
 <211> 499
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(499)
 <223> n = A,T,C or G

<400> 355						60
gtccagagct	gctggtgctc	ccgttcccca	gaccctaccc	ctatccccag	tggagccgga	120
gtgcggggcg	gccccaccac	cgccctcacc	atggtgctgt	tggcagcagc	ggtctgcaca	180
aaagcaggaa	aggctattgt	ttctcgacag	tttgtggaaa	tgaccggaac	tcggattgag	240
ggcttattag	cagcttttcc	aaagctcatg	aacactggaa	aacaacatac	gtttgttgaa	300
acagagagtg	taagatatgt	ctaccagcct	atggagaaac	tgtatatggt	actgatcact	360
accaaaaaca	gcaacatttt	agaagatttg	gagaccctaa	ggctcttctc	aagagtgatc	420
cctgaatatt	gcgagcctta	gaagagaatg	aaatatctga	gcactgnttt	gatttgattt	480
ttgcttttga	tgaaaatgtc	gcactgggat	accggggang	aatgttaact	tggcacagat	499
canaaccttt	cacagaaaa					

<210> 356
 <211> 511
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(511)

<223> n = A,T,C or G

```

<400> 356
gggcttctgc tgaggggggca ggcggagcgt gaggaaaccg cagataagtt ttttctctt 60
tgaaagatag agattaatac aactacttaa aaaatatagt caatagggtta ctaagatatt 120
gcttagcggt aagtttttaa cgtaatttta atagcttaag attttaagag aaaatatgaa 180
gacttagaag agtagcatga ggaaggaaaa gataaaaggt ttctaaaaca tgacggaggt 240
tgagatgaag cttcttcctg gagtaaaaaa tgtattttaa agaaaattga gagaaaggac 300
tacagagccc cgaattaata ccaatagaag ggcaatgctt ttagattaaa atgaagggtga 360
cttaaacagc ttaaagttta ntttaaaagt tgtaggtgat taaaataatt tgaaggcgat 420
cttttaaaaa gagattaaac ccgaagggtga ttaaagacc ttgaaatcca tgacgccagg 480
gagaattgcc gtcattttaa gcctagttaa c 511

```

<210> 357
 <211> 511
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(511)
 <223> n = A,T,C or G

```

<400> 357
gatacttcac atttccctag ggaacgggagc ccgaggggtc cgttcggccc tcttctctc 60
gctggggccga caccgcgctg taggaccgta acccttagtc ccaatgcctc cgtaagcgga 120
gttgagtggg tgcctgtggt tggagctgtg gaggtgtccc cgggtggcgag cgcggccaga 180
actgcggtca ctttaagttt ccgtgtgcgg gttgcaagga gcgtgcgtgc gtctggtata 240
atttggtctc ctgagattct gcttacaaga aaggagtggg aaataccctt ggaaagaaaa 300
ctaaaacagt aagaaaacca aaacttatt ttacatggnt gtcagcacat ttaccgatat 360
ggacactttt cccaataatt tcctcctggt ggagacagtg gattgacagg ttctcagtcg 420
gaattccaga aaaatgttaa ttgatgaaaa ggggtacnat tgagcatcat aaagntaatt 480
attaanacac tgaaggctga acacacaagg g
511

```

<210> 358
 <211> 401
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(401)
 <223> n = A,T,C or G

```

<400> 358
acggatgaag atgatgacct tcaagaaaat gaagacaata aacaacataa agaaagcttg 60
aaaaagagtga cttttgcttt accagatgat gcggaaactg aagatacagg tgttttaaat 120
gtaaagaaaa attctgatga agttaaatcc tcctttgaaa aaagacagga aaagatgaat 180
gaaaaaattg catctttaga aaaagagttg ttagaaaaaa agcccggtgc agcttcaggg 240
ggaagtgaac gcacagaaga ggccagagaa cacctcctgg aggagaccct acctttgcca 300
tctgcccgat ggccctgtga ttacagagga acccccttca ctggagattt ctttaacnga 360
ngatagagat cngnttggga tatgtntcct taagaaaacc t 401

```

<210> 359

<211> 511
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(511)
 <223> n = A,T,C or G

<400> 359
 gcgatgcccg cgcgccccagg acgcctcctc ccgctgctgg cccggccggc ggccctgact 60
 gcgctgctgc tgctgctgct gggccatggc ggccggcgggc gctggggcgc ccggggcccag 120
 gaggcggcgg cggcgccggc ggacggggccc cccgcggcag acggcgaggc cggacaggac 180
 ccgcacagca agcacctgta cacggccgac atgttcacgc acgggatcca gagcgcccgc 240
 gcaacttgct atgttcttcg cgccctgggtg tggacacttg ccagcggtt gcagccgant 300
 ttggaatgac cttggganga acaaatacaa cagcatggaa agaatgcaa aagtctatgt 360
 ggnttaaagt ggacttgac nggccacttc gactngtgc cccccaagg gngggaagat 420
 acccacctta aaacttttca accaagccaa aaactttgaa aaccaggctc cggattcaaa 480
 atggaaaact gatgttcaac ctgaacaaga a 511

<210> 360
 <211> 511
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(511)
 <223> n = A,T,C or G

<400> 360
 tactgggaga ctttgagatt gagtccaaac agctggaagc agagtcttgg agtcggataa 60
 tagacagcaa gtttctaaaa cagcaaaaga aagatgtggt caaacggcaa gaagtaatat 120
 atgagttgat gcagacagag ttcatcatg tcccgaactc caagatcatg agtgggtgtg 180
 cnagccnggg gatgatggcg gatctgntt ttgagcanca gatggtagaa aaagctgggt 240
 ccctgtttgg atgagcttga tcagtatccc ataccattc ttccagagg attcttgag 300
 ccggaaagaa nggagtcttc ttggtgggat aaaaagtga aaagaacttt ctcttcaana 360
 aggatagggg gatgtgcttt gtaaaatcan tttttcagg ngganaatgc cnaaccgtt 420
 ttaaagaaaa acatnttggg naagtttttg tgggccaaaca ttaccgggtc ttgtaaacct 480
 accttcaaag aacctttttg cccagggtta a 511

<210> 361
 <211> 411
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(411)
 <223> n = A,T,C or G

<400> 361
 gctcagcggc ccgatccac ggaagcgcgc tcggaggggt gggacccggc cggaccggag 60
 atggcgccgc cagcggggcg ggccggcgcg gcggcctcgg acttgggctc cgccgcagtg 120

ctcttggtg tgcacgcgc ggtgaggccg ctgggcgcgc gccagacgc cgaagcaca 180
 cttgcggagg ctgcagctta acgcggaccc tgagaagcct ggcgcttncn gctggaactt 240
 cttgcgcgcg gacctggggc ggtaatttga gtggccctga gtcatttcta caccatccag 300
 gccaccaca cgactaagct cacaagaagg ctgaactnnc tgattctnaa cctagaanta 360
 cgtgcatcta tcagtgcng aagaaatgac aacataccac tggcaactct g 411

<210> 362
 <211> 511
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(511)
 <223> n = A,T,C or G

<400> 362
 cgggggaccg ggtgccttg gccctcagc gctcgcgtct tttccggcag ttggaacgct 60
 tcctgttgtc ctcaccgta accgcctgtt gcccctgtc tcagagtcct tcacgcgtcc 120
 cctcccgtct ttggctcgtt ggctgccgc gccggggtt cgccagcctt caagtcgaga 180
 ctactggccg aaggggcgtc tgcggctctc cgccgtcccc agccctgcct ctccctgggc 240
 tctgccatgg caatgacagg ctcaacacct tgctcatcca tgagtaacca cacaaggaa 300
 agggtgacaa tgacaaaag tgacactgga gaatttttat agcaacctta tcgctcacat 360
 gaagaacgag aaatgagaca aaagaagtta gaaaaagggg atggaagaag aaggcctaaa 420
 aaaatgaagg agaaaacaa cttccgaaga tcaaccacat tgcttcggaa anggaaacaa 480
 aantttcttt cgtttgaaan aaaaacaaan a 511

<210> 363
 <211> 401
 <212> DNA
 <213> Homo sapien

<400> 363
 caggatctgg ggagaaagag ccccatccct tctctctctg ccaccatttc ggacaccccg 60
 cagggaactcg ttttgggatt cgcactgact tcaaggaagg acgcgaaccc ttctctgacc 120
 ccagctcggg cggccacctg totttgccgc ggtgacctt ctctcatgac cctgcggtgc 180
 cttgagccct ccgggaatgg cggggaaggg acgcggagcc agtgggggac cgcggggtcg 240
 gcggaggagc catccccgca ggcggcgcggt ctggcgaagg ccctgcggga gctcgggtcag 300
 acaggatggt actggggaag tatgactgtt aatgaagcca aagagaaatt aaaagaggca 360
 ccagaaggaa ctttcttgat tagagatagc tcgcattcag a 401

<210> 364
 <211> 401
 <212> DNA
 <213> Homo sapien

<400> 364
 agtcaaaggt ttcttttccc tttttacat ggtttctaca aaaataacct tcaggaaaaa 60
 gaaaatcagg aaaaaaattt tttttcaata atcttattcc ctatattaaa ttagatttga 120
 agaggattaa cgttgtttta gtttgggtcc agatcagcct tataacaacat ttctaaactc 180
 atttgtactt ttaaaaaatt taaacacaga cttctaaaat tacttgatgt aagtaattta 240
 aatcacttat gaccaagtta ttaaccttat gaatcagaag totgaccctt gtaggaaatt 300
 atattcacat ataaagtaca tcagatcttt gccatatatt gatggttatt atgcataaac 360

acattgagtt gtgttggaag cagatttata aacctgcatg t

<210> 365
<211> 361
<212> DNA
<213> Homo sapien

<400> 365
atctggagtt gcacaaatag ttcttttagaa cataaaacta aatggattta tacataacag 60
ttacattcag catttaagag aggcagtaca aaaatgtgtt ctgcttttat ctgatataaa 120
ttgcatgtaa taccatgatt taaacaatat cagttatatt aactaatgcc atgagatata 180
tcttactcag aacgtctgat gtttcccata atagacagaa aaaatgcagt tgtatgagca 240
actgagtttc ttttcatctt caaattcatt tgtgatgggtg ggaagatcta aggacaatcc 300
ttccattgaa gaagtaggaa aaacagttca gcactgttct gaactcatca aaaatgaaat 360
t 361

<210> 366
<211> 401
<212> DNA
<213> Homo sapien

<400> 366
cgggagcagc agaggtctag cagccggggcg ccgcgggcg ggggcctgag gaggccacag 60
gacgggcgtc ttcccggtta gtggagcccc gcgcggggcc cgctgcggcc gcaccgtgag 120
gggaggaggc cgaggaggac gcagcgccgg ctgccggcgg gaggaagcgc tccaccaggg 180
ccccgcagcg cactcgttta accacatccg cgctctgct ggaaacgctt gctggcgctt 240
gtcaccggtt cctccattt tgaaagggaa aaaggctctc cccacccatt cccctgcccc 300
taggagctgg agccggagga gccgcgctca tggcgctcag cccgtggcag atcctgtccc 360
ccgtgcagtg ggcgaaatgg acgtggtctg cgggtacgcgg c 401

<210> 367
<211> 401
<212> DNA
<213> Homo sapien

<400> 367
catggagtcg ggcaagatgg cgctcccaa gaacgctccg agagatgcct tggatgatggc 60
acagatcctg aaggatatgg gaatcacaga gtatgaacca agggttataa atcaaatgtt 120
ggaatttgct ttccgttatg tgactacaat tctggatgat gcaaaaattt attcgagcca 180
tgctaagaaa cctaattgtg atgcagatga tgtgagactg gcaatccagt gtcgtgctga 240
ccaatctttt acctctctc cccaagaga ttttttactg gatatcgcaa ggcagaaaaa 300
tcaaaccctt ttgccactga ttaagccata tgcaggacct agactgccac ctgatagata 360
ctgcttaaca gtcctaaact ataggctgaa gtccttaatt a 401

<210> 368
<211> 401
<212> DNA
<213> Homo sapien

<400> 368
cggagcggta ggagcagcaa tttatccgtg tgcagcccca aactggaaag aagatgctaa 60
ttaaagtga gacgtgacc ggaaaggaga ttgagattga cattgaacct acagacaagg 120
tggagcgaat caaggagcgt gtggaggaga aagagggaat cccccacaa cagcagaggc 180
tcatctacag tggcaagcag atgaatgatg agaagacagc agctgattac aagattttag 240

gtggttcagt ccttcacctg gtgttggctc tgagaggagg aggtggtctt aggcaagtgat 300
 ggaccctcca ttttacctct ttaccctgtc gctcataatg aggcatacata taccctctca 360
 ctctctggga caccatagcc ctgccccctc ccctggatgc c 401

<210> 369
 <211> 174
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(174)
 <223> n = A,T,C or G

<400> 369
 gcgagnnggg cgccaagcgc ggggccggag cggccttccc ggagtccttt gcgcggcacc 60
 tggcgacaaa atggctgccc gagggagacg ggccggagcct cagggccggg aggtccggg 120
 ccccgccggc ggtggcggtg gcgggagccg ttgggctgag tcgggatcgg ggac 174

<210> 370
 <211> 375
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(375)
 <223> n = A,T,C or G

<400> 370
 tgcttttcca actttattta gaaaaacaaa tccaggtccc agtgccccct gtaccctccc 60
 cgacccccagc cataatttaa ataacttana gacagagttg gagggagggg acagganagg 120
 ttgggggtcac ggtggaagga ggaaganagc ccactacagc cgccgcagcg cccgcttctt 180
 gtccgtcttt ttcttggccg ccagcttctt atcgcgctcg ccagcatgct tnttggccat 240
 gggaccctca gccccctccg ggccccctgg ggccccaggg tcggtggagg aagcttcagt 300
 gccactggcc agggcccgac cggttccggc cctgccgctg ggcccccgcg cgccccctg 360
 gatctctgtg agcag 375

<210> 371
 <211> 375
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(375)
 <223> n = A,T,C or G

<400> 371
 taaattctaa aaaatatttt aatacttgaa aacttctaaa acaaaaggta aggtaacatg 60
 ttctttcaaa agtgaatttc acatgcaaac cattaattat atttatttta ctgngagata 120
 aaagcaaaac ataacattcg gagaaaagga ccagtaactg acctatttat tttatattat 180
 attaattgna atcctcatta gaaatgtgat aacgttattg cacaacaaa accgtgggca 240
 gaaacatccc agcaatgcag gggcgcccat accgggttac aagggatgtc cagcatgtgt 300

ttccctggaa cactcanagt ctgcactttt cctgcaaagt ggaccatgtc tgattattta
 ttatgaaaga aact

360
 375

<210> 372
 <211> 164
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(164)
 <223> n = A,T,C or G

<400> 372
 cgctctgtnt cctcaacctc tacctggcgg aggttatatg taaagtcaga tgtgccactg
 aacttgacag acacaaaatt ctactgcatt tgggctttat aatggcaagc ctgctctttt
 tagtggtgaa cttgacttgc gcaatgctag ttcattggaga tgct

60
 120
 164

<210> 373
 <211> 401
 <212> DNA
 <213> Homo sapien

<400> 373
 gcgctgttcg cctttgccta cctgcagctg tggcggtgc tccgtgtaccg cgagcggcgg
 ctgagttacc agagcctctg cctcttctc tgtctcctgt gggcagcgt caggaccacc
 ctcttctcgg ccgcttctc gctcagcggc tccctgccct tgcctccggc gccgctcac
 ctgcaactct tccccactg gctgctctac tgcctcccct cctgtctcca gttctccacg
 ctctgtctcc tcaacctcta cctggcggag gttatatgta aagtcagatg tgccactgaa
 cttgacagac acaaaattct actgcatttg ggctttataa tggcaagcct gctcttttta
 gtggtgaact tgacttgcgc aatgctagtt catggagatg t

60
 120
 180
 240
 300
 360
 401

<210> 374
 <211> 401
 <212> DNA
 <213> Homo sapien

<400> 374
 ggaatgatac cattcagatt gatttggaga ctggcaagat tactgatttc atcaagttcg
 aacttggtaa cctgtgtatg gtgactggag gtgctaacct aggaagaatt ggtgtgatca
 ccaacagaga gaggcaccct ggatcttttg acgtggttca cgtgaaagat gccaatggca
 acagctttgc cactcgactt tccaacattt ttgttatttg caagggcaac aaaccatgga
 tttctcttcc ccgaggaaaag ggtatccgcc tcaccattgc tgaagagaga gacaaaagac
 tggcggccaa acagagcagt ggtgaaatg ggtccctggg tgacatgtca gatctttgta
 cgtaattaaa aatattgtgg caggattaat agcaaaaaa a

60
 120
 180
 240
 300
 360
 401

<210> 375
 <211> 401
 <212> DNA
 <213> Homo sapien

<400> 375
 gagcggagtc cgctggctga cccgagcgt ggtctccgcc gggaaccctg gggcatggag
 aggtctgagt acctcggccg cggcgcacgc tgcatcgccg agccaggccg aggacgtgag

60
 120

ggtggagggc tcctttcccg tgaccatgct tccgggagac ggtgtggggc ctgagctgat 180
gcacgccgtc aaggaggtgt tcaaggctgc cgctgtccca gtggagttcc aggagcacca 240
cctgagtga gtcagaata tggcatctga ggagaagctg gagcaggtgc tgagttccat 300
gaaggagaac aaagtggcca tcattggaaa gattcatacc ccgatggagt ataaggggga 360
gctagcctcc tatgatatgc ggctgaggcg taagttggac t 401

<210> 376
<211> 284
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(284)
<223> n = A,T,C or G

<400> 376
ggaacaaggt cgtgaaaaaa aaggtcttgg tgagggtgccg ccatttcatc tgtcctcatt 60
ctctgcgcct ttcgcagagc ttccancagc tggatgttg ggccagagca tccggagggt 120
cacaacctct gtgtccgta ggagccacta tgaggagggc cctgggaaga atttgccatt 180
ttcagtggaa aacaagtggc cgttactagc taagatgtgt ttgtactttg gatctgcatt 240
tgctacaccc ttccttgtn taagacacca actgcttaaa acat 284

<210> 377
<211> 401
<212> DNA
<213> Homo sapien

<400> 377
atztatgtta ttgcaactct ggtgtgattt atcgtatgta tctgataggt tttatgaatt 60
gttttgagtt gtaaaactct atacccttta ttaaaatgga cctaattaag tgatttatgc 120
tttgtgcaat ttcttaaact agatctctct aggattgaag ggatccatag gtatctttca 180
cttagtgtga agcctagtag tatactttta tattcctgaa gagagaccag cattaacata 240
aagagagaag tcttaggaaa aaatatacct aagaattatt tttaaaattc atactgtgaa 300
ggagaatctg cctgcctatt tcctctccaa atttcagaaa ataacacaga gtgctatttg 360
cctgaacttt aatgagcttg actttgttat gattcagggg g 401

<210> 378
<211> 401
<212> DNA
<213> Homo sapien

<400> 378
ccagaacaca ggtgtcgtga aaactacccc taaaagccaa aatgggaaag gaaaagactc 60
atatcaacat tgtcgtcatt ggacacgtag attcgggcaa gtccaccact actggccatc 120
tgatctataa atgcggtggc atcgacaaaa gaaccattga aaaatttgag aaggaggctg 180
ctgagatggg aaagggtccc ttcaagtatg cctgggtcct ggataaactg aaagctgagc 240
gtgaacgtgg tatcaccatt gatctctcct tgtggaaatt tgagaccagc aagtactatg 300
tgactatcat tgatgcccc ggacacagag actttatcaa aaacatgatt acagggacat 360
ctcaggctga ctgtgctgct ctgattgttg ctgctggtgt t 401

<210> 379
<211> 401
<212> DNA

<213> Homo sapien

<400> 379	60
tcagatatca ggtggcttct tcaaatgatt tttaagtatc tcgatgatga tgaagaacaa	120
agacatcaat caggattcag gaagacagct tttgcggaaa atgcttaaag ggaagcatca	180
aggattggtg ttgatatttg aaagttaaag agtgggtatac tttatttcag tcaacacatg	240
acaaatgtaa aaggcactca tttgttggtc ctggaagaag cctggcagca ttccattcag	300
acatctgccc tttcatcgtc ccacttttta cttattgcag tcctttcagt ctgaatattt	360
cctcctgacg catcttctgc cgtccgaaat gactccctgc tcccagatcc tgtagccctt	401
attattgaca cctttcattt agaaatttag cacatgtcac a	

<210> 380

<211> 401

<212> DNA

<213> Homo sapien

<400> 380	60
cctgactctc tgaggctcat tttgcagttg ttgaaattgt ccccgagtt ttcaatcatg	120
tctgaaccaa tcagagtcct tgtgactgga gcagctggtc aaattgcata ttcaactgctg	180
tacagtattg gaaatggatc tgtctttggt aaagatcagc ctataattct tgtgctgttg	240
gatatcacc ccatgatggg tgtcctggac ggtgtcctaa tggaactgca agactgtgcc	300
cttccctcc tgaaagatgt catcgcaaca gataaagaag acgttgctt caaagacctg	360
gatgtggcca ttcttggtgg ctccatgcc aagaagggaag gcatggagag aaaagattta	401
ctgaaagcaa atgtgaaaat cttcaaatcc caggggtgcag c	

<210> 381

<211> 401

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(401)

<223> n = A,T,C or G

<400> 381	60
ggggcttcgc tggcagctctg aacggcaagc ttgagcaacg cggtaaaaaat attgcttcgg	120
tgggtgacgc ggtacagctg tccaagggcn ttngtaacgg gaatgccgaa gcgtgggaaa	180
aaggagcgg tggcggaaga cggggatgag ctgagcagag agccagaggc caagaagagt	240
aagacggccg caaagaaaaa tgacaaagag gcagcaggag agggcccagc cctgtatgag	300
gacccccag atcagaaaaa ctcacccagt ggcaaacctg ccacactcaa gatctgctct	360
tggaatgtgg atgggcttcg agcctggatt aagaagaaag gattagattg ggtaaaggaa	401
gaagccccag atatactgtg cttcaagag accaaatgtt c	

<210> 382

<211> 491

<212> DNA

<213> Homo sapien

<400> 382	60
gagcagcccc cggcggtga aagccggggc agaagtgtg gtctcggtcg ggattccggg	120
cttgggtcca ccgagggcgc gactgcggta ggagggaaga ggttttggac gcgtggcct	180
cccgcgctg tgcatcgag cattatttca gttcaaaatg aactatatgc ctggcaccgc	240
cagcctcatc gaggacattg acaaaaagca cttggttctg cttcgagatg gaaggacact	

tataggcttt	ttaagaagca	ttgatcaatt	tgcaaaactta	gtgctacatc	agactgtgga	300
gcgtattcat	gtgggcaaaa	aatacgggtga	tattcctcga	gggatttttg	tggtcagagg	360
agaaaatgtg	gtcctactag	gagaaataga	cttggaagag	gagagtgaca	cacccctcca	420
gcaagtatcc	attgaagaaa	ttctagaaga	acaaaggggtg	gaacagcaga	ccaagctgga	480
agcagagaag	t					491

<210> 383
 <211> 491
 <212> DNA
 <213> Homo sapien

<400> 383						60
gagtccatct	cagcgccctg	aaaatgcagt	gaaaaaacct	gaagataaaa	aggaagtttt	120
cagaccctc	aagcctgctg	gcgaagtggg	tctgaccgca	ctggccaaa	agcttcgagc	180
agtggaaagt	gtacggccac	ctcaciaaagt	aacggactac	tcctcatcca	gtgaggagtc	240
ggggacgacg	gatgaggagg	acgacgatgt	ggagcaggaa	ggggctgacg	agtccacctc	300
aggaccagag	gacaccagag	cagcgctcatc	tctgaatttg	agcaatgggtg	aaacggaatc	360
tgtgaaaacc	atgattgtcc	atgatgatgt	agaaagtggg	ccggccatga	ccccatccaa	420
ggagggcact	ctaatacgctc	gccagagtac	agttgaccaa	aagcgtgcc	gccatcatga	480
gagcaatggc	tttgccgggtc	gcattcacct	cttgccagat	ctcttacagc	aaagccattc	491
ctcctccact	t					

<210> 384
 <211> 491
 <212> DNA
 <213> Homo sapien

<400> 384						60
gagcctaatt	tcaggtgggtc	cacccgagac	cccttgagca	ccaaccctag	tccccgcgc	120
ggccccttat	tcgctccgac	aaggtacaaa	aaggctctgg	acggcggcgt	ggtaggagga	180
cgggagcggg	ggcggaagt	tcctgaagg	agcgagacag	ggaggagacag	ggcagaggag	240
gagagggaag	cgatgcgacg	gacaggcgca	cccgtcagg	ctgactctcg	ggggcgaggt	300
cgagccagg	gcggctgccc	tgggggagag	gcgacgctgt	ctcaacctcc	acctcgcggc	360
ggaacccgag	gacaggagcc	tcagatgaaa	gaaacaatca	tgaaccagga	aaaactcgcc	420
aaactgcagg	cacaagtgcg	cattgggtgg	aaagggaactg	ctcgagagaa	gaagaagggtg	480
gttcatagaa	cagccacagc	agatgacaaa	aaacttcagt	tctccttaa	gaagttagg	491
gtaaacata	t					

<210> 385
 <211> 483
 <212> DNA
 <213> Homo sapien

<400> 385						60
agccgctgcg	aaggagagccg	ccgcatgtc	tgcgcatctg	caatggatgg	tcgtgcggaa	120
ctgctccagt	ttcctgatca	agaggataaa	gcagacctac	agcactgagc	ccaataactt	180
gaaggccccgc	aattccttcc	gctacaacgg	actgattcac	cgcaagactg	tggcggtgga	240
gccggcagcc	gacggcaaa	gtgtcgtgg	ggtcattaag	cggagatccg	gccagcgga	300
gectgccacc	tcctatgtgc	ggaccaccat	caacaagaat	gctcgcgcca	cgctcagcag	360
catcagacac	atgatccgca	agaacaagta	ccgccccgac	ctgcgcatgg	cagccatccg	420
cagggccagc	gccatcctgc	gcagccagaa	gcctgtgatg	gtgaagagga	agcggaccgg	480
ccccaccaag	agctcctgag	ccccctgccc	ccagagcaat	aaagtcagct	ggctttctca	491
cct						

<210> 386
 <211> 491
 <212> DNA
 <213> Homo sapien

<400> 386
 aggtggaagg aaaaaacata aatgaagtta atgcacttct tttcctagcc caaaagtcac 60
 tgtgattata tttttttaat gaagtttaga aaaaaagctg ttgtcttctc aattgtaaaa 120
 ttagtttcaa aatgctgctt ctcttatcat tagtctagta attgttgaaac ttttctgcaa 180
 actgcatttt acaaaattga aacttggaag ctgtattaac ttttatagtt aaacattgta 240
 ttaaataaac tatactataa taaacagttt ggttttgtat tttttaaatt gtattatcca 300
 gcctttttaa aattaaaagc taaataatga aaataaacca attaaaacat acttttactc 360
 tcagatatac aggtatttac attatgaaaa aactgaacaa agttttaaca atactgagct 420
 ttaagaattt agccagcagg gaaaatttcc aggtttgaga atgttctaata gtaaatattt 480
 aatcataata c 491

<210> 387
 <211> 491
 <212> DNA
 <213> Homo sapien

<400> 387
 ccacaccacc gtgtcccaag tccagccccc tccctccaag gcatcagcac ctgaaccccc 60
 tgcagaagaa gaagtggcaa ctggtacaac ctacagcctct gatgacctgg aagccctggg 120
 tacactgagc ctggggacca cagaggagaa ggcagcagct gaggcggctg tgcccaggac 180
 cattggggcc gagctgatgg agctgggtcg gagaacaact ggcctgagcc acgaattatg 240
 ccgggtggcc atcggcatca tagtgggtca catccaggcc tcggtgccgg ccagctcacc 300
 agtcatggag caggtcctcc tctcaactcg agagggcaag gacctagca tggccctgcc 360
 ctacgggcag gtctgccacg accagcagag gctggaggtg atctttgcag acctggctcg 420
 ccggaaggac gacgcccagc agcgccagttg ggcactatat gaggatgagg gtgtcatccg 480
 ctgctaccta g 491

<210> 388
 <211> 491
 <212> DNA
 <213> Homo sapien

<400> 388
 gagactatca aactcctgag ccaacaactt aatatgacta gcttacacaa tagcttttat 60
 agtaaagata cctctttacg gactccactt atgactccct aaagcccatg tcgaagcccc 120
 catcgctggg tcaatagtac ttgccgcagt actcttgaaa ctaggcggct atggtataat 180
 acgcctcaca ctcatctca accccctgac aaaacacata gctaccctt tccttgact 240
 atccctatga ggcataatta taacaagctc catctgccta cgacaaacag acctaaaatc 300
 gctcattgca tactcttcaa tcagccacat agccctcgta gtaacagcca ttctcatcca 360
 aacccctga agcttcaccg gcgcagtcac tctcataatc gcccacggac ttacatcctc 420
 attactattc tgccctagcaa actcaaaacta cgaacgcact cacagtgcga tcataatcct 480
 ctctcaagga c 491

<210> 389
 <211> 511
 <212> DNA
 <213> Homo sapien

<220>

<221> misc_feature
 <222> (1)...(511)
 <223> n = A,T,C or G

<400> 389
 tactgataac tctttaatac tttcatcatt caagtttggt canaacatta caagaggcat 60
 gaaagaaaaa ataattccat ttttaaaact ctgtctgtcc aaagtataac atatgaaacc 120
 atgccattat ctnttaggaa acaaaagcat tcaaaattaa tttggtatta aagttcaaga 180
 ttcanactaa cctcaaagta cggcatgtgc agtggttaag tgcaanaagt attttcattc 240
 caattatattt acananaatgc tggagtgcag tgtgcaattt gaaatattca aatcctttta 300
 ggnttctgaa ctaagtgttt aaatgaaaac tgaaatgctg catagtttca gtggctttca 360
 atttcctggt tgatctcaga aatataatgga tgatctttgc cgtgagctac ttccatgatt 420
 gcaatggcct tcttcagggc tttctcccct gcggtttgt gttccaggcc catgtagagt 480
 ctccctagct tcaaccacat ggaggccacg t 511

<210> 390
 <211> 1984
 <212> DNA
 <213> Homo sapien

<400> 390
 cctgggggta gaggtggggg tgggtggggg gtaagggggc agtcctttct ccttcgacg 60
 gcgggtccga gtccagcccc ttccttcccg cgctcgctcg cccggccccc agccccctca 120
 tgagggtgtc cgtgccgggt cggcgggccg ctgccgcccc cgagagccct 180
 ccacgcccgg cggggggcagc ggaggcggag gcgcgctgc tgagcctca ggcgccgagg 240
 tgccggggtc cgtgcagttg gcgctgagcg tctgcacgc cctgctctac gccgctgtgt 300
 tcgcctttgc ctacctgcag ctgtggcggc tgctcctgta ccgagagcgg cggctgagtt 360
 accagagcct ctgcctcttc ctctgtctcc tgtgggcagc gctcaggacc accctcttct 420
 ccgcgccttt ctgcctcagc ggctccctgc ccttgctccg gccgcccgt cactgcact 480
 tcttccccca ctggctgtct tactgtctcc cctcctgtct ccagttctcc acgctctgtc 540
 tctcaacct ctacctggcg gaggttatat gtaagtcag atgtgccact gaacttgaca 600
 gacacaaaat tctactgcat ttgggcttta taatggcaag cctgctcttt ttagtggtga 660
 acttgacttg cgcaatgcta gttcatggag atgtcccaga aaatcagttg aagtggactg 720
 tgtttggtcg agcattaatt aatgatagcc tgtttattct ttgtgccatc tctttagtgt 780
 gttacatatg caaaattaca aaaatgtcat cagctaattg ctacctcgaa tcaaagggtta 840
 tgtctctgtg ccagactgtc atcgtgggct ctgtagtcat tcttctgtac tcttccagag 900
 cttgttataa tttggtggtg gtcaccatat ctcaggatac attagaaaagt ccatttaatt 960
 atggctggga taatctttca gataaggctc atgtagaaga cataagtggga gaagagtata 1020
 tagtatttgg aatggtcctc tttctgtggg aacatgtgcc agcatggtcg gtggtactgt 1080
 ttttccgggc acagagatta aaccagaatt tggcacctgc tggcatgata aatagtcaca 1140
 gttatagtcc cagagcttac tttttcgaca atccaagacg atatgatagt gatgatgacc 1200
 tgccaagact gggaggttca agagaaggaa gtttaccaaa ttgcgaaagt ttgggctggt 1260
 atggcaccat gactgggtgt ggcagcagca gttacacagt cactccccac ctgaatggac 1320
 ctatgacaga tactgctcct ttgctcttta cttgtagtaa tttagatttg aacaatcatc 1380
 atagcttata tgtgacacca caaaactgac agcatcacca agtcatgatt cttgagttgt 1440
 ttttcataaa tgtgtatatt caatgtgttt aaattccatc tacataaaca ttccattatc 1500
 tgttgcaact gaaaacaaaa tctggaagtg tggctgtgtt tggtaaataa cacagctatt 1560
 atttttgacc tcttcatagt aaaatgaagt aaaatggaaa gtttgagta ggagaaaaga 1620
 gagattagat cttaaggcac ttgatggcct ccaaaaatcc tgactttgga acatcaaagt 1680
 catatgtgca cttttatctt tgttctgagt cactgcagtc cccaaagtca tatgccaatg 1740
 ttcacactga aatactgtat tgtacaccaa actggaaggc aattttccta tgaaaatcaa 1800
 agccggtata ttcattggta tgctctatac agatatctta ataaaaatct tatagtgtga 1860
 acagtgcaca gagttaaggc ataaaaatgt atcattcttt ataaaaatct actgaaaatg 1920
 tgtaaatcatt gaagacagtt cttttaagca tgattttaaa atagcaactg aaattcaatc 1980

1984

attt

<210> 391
 <211> 429
 <212> PRT
 <213> Homo sapien

<400> 391
 Met Arg Val Ser Val Pro Gly Pro Ala Ala Ala Ala Pro Ala Ala
 5 10 15

Gly Arg Glu Pro Ser Thr Pro Gly Gly Gly Ser Gly Gly Gly Ala
 20 25 30

Val Ala Ala Ala Ser Gly Ala Ala Val Pro Gly Ser Val Gln Leu Ala
 35 40 45

Leu Ser Val Leu His Ala Leu Leu Tyr Ala Ala Leu Phe Ala Phe Ala
 50 55 60

Tyr Leu Gln Leu Trp Arg Leu Leu Leu Tyr Arg Glu Arg Arg Leu Ser
 65 70 75 80

Tyr Gln Ser Leu Cys Leu Phe Leu Cys Leu Leu Trp Ala Ala Leu Arg
 85 90 95

Thr Thr Leu Phe Ser Ala Ala Phe Ser Leu Ser Gly Ser Leu Pro Leu
 100 105 110

Leu Arg Pro Pro Ala His Leu His Phe Phe Pro His Trp Leu Leu Tyr
 115 120 125

Cys Phe Pro Ser Cys Leu Gln Phe Ser Thr Leu Cys Leu Leu Asn Leu
 130 135 140

Tyr Leu Ala Glu Val Ile Cys Lys Val Arg Cys Ala Thr Glu Leu Asp
 145 150 155 160

Arg His Lys Ile Leu Leu His Leu Gly Phe Ile Met Ala Ser Leu Leu
 165 170 175

Phe Leu Val Val Asn Leu Thr Cys Ala Met Leu Val His Gly Asp Val
 180 185 190

Pro Glu Asn Gln Leu Lys Trp Thr Val Phe Val Arg Ala Leu Ile Asn
 195 200 205

Asp Ser Leu Phe Ile Leu Cys Ala Ile Ser Leu Val Cys Tyr Ile Cys
 210 215 220

Lys Ile Thr Lys Met Ser Ser Ala Asn Val Tyr Leu Glu Ser Lys Gly
 225 230 235 240

Met Ser Leu Cys Gln Thr Val Ile Val Gly Ser Val Val Ile Leu Leu

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

```
<210> 392
<211> 1584
<212> DNA
<213> Homo sapiens
```

[illegible]

```
<210> 393
<211> 191
<212> PRT
<213> Homo sapiens
```

Lys Thr Ser Ile Leu Glu Gln Leu Leu Tyr Gly Asn His Val Val Gly
20 25 30

Ser Glu Met Ile Glu Thr Gln Glu Asp Ile Tyr Val Gly Ser Ile Glu
35 40 45

35
Thr Asp Arg Gly Val Arg Glu Gln Val Arg Phe Tyr Asp Thr Arg Gly
50 55 60

50
Leu Arg Asp Gly Ala Glu Leu Pro Arg His Cys Phe Ser Cys Thr Asp
65 70 75 80

65
Gly Tyr Val Leu Val Tyr Ser Thr Asp Ser Arg Glu Ser Phe Gln Arg
85 90 95

Val Glu Leu Leu Lys Lys Glu Ile Asp Lys Ser Lys Asp Lys Lys Glu
100 105 110

Val Thr Ile Val Val Leu Gly Asn Lys Cys Asp Leu Gln Glu Gln Arg
115 120 125

Arg Val Asp Pro Asp Val Ala Gln His Trp Ala Lys Ser Glu Lys Val
130 135 140

130
Lys Leu Trp Glu Val Ser Val Ala Asp Arg Arg Ser Leu Leu Glu Pro
145 150 155 160
Ser Ala

145
Phe Val Tyr Leu Ala Ser Lys Met Thr Gln Pro Gln Ser Lys Ser Ala
165 170 175

Phe Pro Leu Ser Arg Lys Asn Lys Gly Ser Gly Ser Leu Asp Gly
180 185 190

<210> 394
<211> 1937
<212> DNA
<213> Homo sapiens

<400> 394
ccgggtccccc cagctctggg taccgggtc tgcacgcgt cgccatgat ggccatcgtc 60
cagtgcctgt gtcagccag aacacaaagc gtgaatccgg aagaaaagtt caatctggaa 120
acatcaatgc tgccaagact attgcagata tcatccgaac atgtttggga cccaagtcca 180
tgatgaagat gcttttgac ccaatgggag gcattgtgat gaccaatgat ggcaatgcca 240
ttcttcgaga gattcaagtc cagcatccag cggccaagtc catgatcgaa attagccgga 300
cccaggatga agagggttga gatgggacca catcagtaat tattcttgca ggggaaatgc 360
tgtctgtagc tgagcacttc ctggagcagc agatgcaccc aacagtgggtg atcagtgcct 420
accgcaaggc attggatgat atgatcagca ccctaaagaa aataagtatc ccagtcgaca 480
tcagtgcagc tgatatgat ctgaacatca tcaacagctc tattactacc aaagccatca 540
gtcgggtggtc atctttggct tgcaacattg ccctggatgc tgtcaagatg gtacagtttg 600
aggagaatgg tcggaaagag attgacataa aaaaatatgc aagagtggaa aagataacctg 660
gaggcatcat tgaagactcc tgtgtcttgc gtggagtcac gattaacaag gatgtgacctg 720
atccacgtat cggcgctat atcaagaacc ctgcgattgt gctgctggat tcttctctgg 780
aatacaagaa aggagaaagc cagactgaca ttgagattac acgagaggag gacttcaccc 840
gaattctcca gattggaggaa gactacatcc agcagctctg tgaggacatt atccaactga 900
agcccgatgt ggtcatcact gaaaagggca tctcagattt agctcagcac taccttatgc 960
gggccaatat cacagccatc cgcagagtcg ggaagacaga caataatcgc attgctagag 1020
cctgtggggc ccggatagtc agccgaccag aggaactgag agaagatgat gttggaacag 1080
gagcaggcct gttggaaatc aagaaaattg gagatgaata ctttactttc atcactgact 1140
gcaaagaccc caaggcctgc accattctcc tccggggggc tagcaaagag attctctcgg 1200
aagtagaacg caacctccag gatgccatgc aagtgtgtcg caatgttctc ctggaccctc 1260
agctggtgcc agggggtggg gcctccgaga tggctgtggc ccatgccttg acagaaaaat 1320
ccaaggccat gactggtgtg gaacaatggc catacagggc tgttgccag gccctagagg 1380
tcattcctcg taccctgac cagaactgtg gggccagcac catccgtcta cttacctccc 1440
ttcgggccaa gcacaccag gagaactgtg agacctggg tgtaaattgt gagacgggta 1500
ctttggtgga catgaaggaa ctgggcatat gggagccatt ggctgtgaag ctgcagactt 1560
ataagacagc agtggagacg gcagttctgc tactgcgaat tcctgatgct ggccaggagt 1680
acaaaaagaa aggcgatgac cagagccggc aaggcggggc agtctcccct tttcctgagc 1740
gagtgcctag caaggctact tcaatgcaca gaaccagcag gatcaggttg gggggcagcc 1800
cagagtgccca ggaacactgt ggacgtcttt gttcagaagg ctgacatgta attcttctct 1860
cccagtcctt ttctgtccca gctcagtttt ccaaaagaca ctaagtcatt tgaaaaaaa 1920
attgtaaggt ttccatttag tttgcttccg atgattaaat ctaagtcatt tgaaaaaaa 1937
aaaaaaaaa actcgag

<210> 395
<211> 1675
<212> DNA
<213> Homo sapiens

<400> 395
gcgcgaatcg cggctcgag ccatggagga ggaggcatcg tccccggggc tgggctgcag 60
caagccgcac ctggagaagc tgaccctggg catcacgcgc atcctagaat cttccccagg 120
tgtgactgag gtgaccatca tagaaaagcc tctgtctgaa cgtcatatga tttcttctctg 180
ggaacaaaag aataactgtg tgatgcctga agatgtgaag aacttttacc tgatgaccaa 240

Ile Ile Leu Ala Gly Glu Met Leu Ser Val Ala Glu His Phe Leu Glu
115 120 125

Gln Gln Met His Pro Thr Val Val Ile Ser Ala Tyr Arg Lys Ala Leu
 130 135 140
 Asp Asp Met Ile Ser Thr Leu Lys Lys Ile Ser Ile Pro Val Asp Ile
 145 150 155 160
 Ser Asp Ser Asp Met Met Leu Asn Ile Ile Asn Ser Ser Ile Thr Thr
 165 170 175
 Lys Ala Ile Ser Arg Trp Ser Ser Leu Ala Cys Asn Ile Ala Leu Asp
 180 185 190
 Ala Val Lys Met Val Gln Phe Glu Glu Asn Gly Arg Lys Glu Ile Asp
 195 200 205
 Ile Lys Lys Tyr Ala Arg Val Glu Lys Ile Pro Gly Gly Ile Ile Glu
 210 215 220
 Asp Ser Cys Val Leu Arg Gly Val Met Ile Asn Lys Asp Val Thr His
 225 230 235 240
 Pro Arg Met Arg Arg Tyr Ile Lys Asn Pro Arg Ile Val Leu Leu Asp
 245 250 255
 Ser Ser Leu Glu Tyr Lys Lys Gly Glu Ser Gln Thr Asp Ile Glu Ile
 260 265 270
 Thr Arg Glu Glu Asp Phe Thr Arg Ile Leu Gln Met Glu Glu Glu Tyr
 275 280 285
 Ile Gln Gln Leu Cys Glu Asp Ile Ile Gln Leu Lys Pro Asp Val Val
 290 295 300
 Ile Thr Glu Lys Gly Ile Ser Asp Leu Ala Gln His Tyr Leu Met Arg
 305 310 315 320
 Ala Asn Ile Thr Ala Ile Arg Arg Val Arg Lys Thr Asp Asn Asn Arg
 325 330 335
 Ile Ala Arg Ala Cys Gly Ala Arg Ile Val Ser Arg Pro Glu Glu Leu
 340 345 350
 Arg Glu Asp Asp Val Gly Thr Gly Ala Gly Leu Leu Glu Ile Lys Lys
 355 360 365
 Ile Gly Asp Glu Tyr Phe Thr Phe Ile Thr Asp Cys Lys Asp Pro Lys
 370 375 380
 Ala Cys Thr Ile Leu Leu Arg Gly Ala Ser Lys Glu Ile Leu Ser Glu
 385 390 395 400
 Val Glu Arg Asn Leu Gln Asp Ala Met Gln Val Cys Arg Asn Val Leu
 405 410 415

Leu Asp Pro Gln Leu Val Pro Gly Gly Gly Ala Ser Glu Met Ala Val
420 425 430

Ala His Ala Leu Thr Glu Lys Ser Lys Ala Met Thr Gly Val Glu Gln
435 440 445

Trp Pro Tyr Arg Ala Val Ala Gln Ala Leu Glu Val Ile Pro Arg Thr
450 455 460

Leu Ile Gln Asn Cys Gly Ala Ser Thr Ile Arg Leu Leu Thr Ser Leu
465 470 475 480

Arg Ala Lys His Thr Gln Glu Asn Cys Glu Thr Trp Gly Val Asn Gly
485 490 495

Glu Thr Gly Thr Leu Val Asp Met Lys Glu Leu Gly Ile Trp Glu Pro
500 505 510

Leu Ala Val Lys Leu Gln Thr Tyr Lys Thr Ala Val Glu Thr Ala Val
515 520 525

Leu Leu Leu Arg Ile Asp Asp Ile Val Ser Gly His Lys Lys Lys Gly
530 535 540

Asp Asp Gln Ser Arg Gln Gly Gly Ala Pro Asp Ala Gly Gln Glu
545 550 555

<210> 397

<211> 307

<212> PRT

<213> Homo sapiens

<400> 397
Arg Glu Ser Arg Ser Arg Ala Met Glu Glu Glu Ala Ser Ser Pro Gly
5 10 15

Leu Gly Cys Ser Lys Pro His Leu Glu Lys Leu Thr Leu Gly Ile Thr
20 25 30

Arg Ile Leu Glu Ser Ser Pro Gly Val Thr Glu Val Thr Ile Ile Glu
35 40 45

Lys Pro Pro Ala Glu Arg His Met Ile Ser Ser Trp Glu Gln Lys Asn
50 55 60

Asn Cys Val Met Pro Glu Asp Val Lys Asn Phe Tyr Leu Met Thr Asn
65 70 75 80

Gly Phe His Met Thr Trp Ser Val Lys Leu Asp Glu His Ile Ile Pro
85 90 95

Leu Gly Ser Met Ala Ile Asn Ser Ile Ser Lys Leu Thr Gln Leu Thr

100 105 110
 Gln Ser Ser Met Tyr Ser Leu Pro Asn Ala Pro Thr Leu Ala Asp Leu
 115 120 125
 Glu Asp Asp Thr His Glu Ala Ser Asp Asp Gln Pro Glu Lys Pro His
 130 135 140
 Phe Asp Ser Arg Ser Val Ile Phe Glu Leu Asp Ser Cys Asn Gly Ser
 145 150 155 160
 Gly Lys Val Cys Leu Val Tyr Lys Ser Gly Lys Pro Ala Leu Ala Glu
 165 170 175
 Asp Thr Glu Ile Trp Phe Leu Asp Arg Ala Leu Tyr Trp His Phe Leu
 180 185 190
 Thr Asp Thr Phe Thr Ala Tyr Tyr Arg Leu Leu Ile Thr His Leu Gly
 195 200 205
 Leu Pro Gln Trp Gln Tyr Ala Phe Thr Ser Tyr Gly Ile Ser Pro Gln
 210 215 220
 Ala Lys Gln Trp Phe Ser Met Tyr Lys Pro Ile Thr Tyr Asn Thr Asn
 225 230 235 240
 Leu Leu Thr Glu Glu Thr Asp Ser Phe Val Asn Lys Leu Asp Pro Ser
 245 250 255
 Lys Val Phe Lys Ser Lys Asn Lys Ile Val Ile Pro Lys Lys Lys Gly
 260 265 270
 Pro Val Gln Pro Ala Gly Gly Gln Lys Gly Pro Ser Gly Pro Ser Gly
 275 280 285
 Pro Ser Thr Ser Ser Thr Ser Lys Ser Ser Ser Gly Ser Gly Asn Pro
 290 295 300
 Thr Arg Lys
 305

<210> 398
 <211> 416
 <212> DNA
 <213> Homo sapiens

<400> 398
 agaattcggc acgaggattg cctatctcca gtgcaacaac catcaagtgt gctgaaagtc 60
 ttcagccggg tgctgcagca gtggaagaaa gggctacagg tccagtcttg ataagcaccg 120
 ccgactttga ggggcctatg cccagtgcgc cccagaagc tgaaagtcct cttgcctcaa 180
 ccagcaagga ggagaaggat gaatgtgctc tcatttccac tagcatagca gaagaatgtg 240

```
<210> 399
<211> 259
<212> DNA
<213> Homo sapiens
```

```
<220>  
<221> misc_feature  
<222> (1)...(259)  
<223> n = A,T,C or G
```

```

<400> 399
caaaagaattc ggcacgaggg ggcgacctgc attcggacgt caccgaggcc atgtgtacg 60
aaaagtccag ccccgcgggg cctgtgctgt ncatccgggt ctgccngat atgatcacc 120
gccgctccct gggctatgcc tacgnaact tccancaacc ggccgacgt gatcgggctt 180
tggacaccat gaactttgat gtgattnagg gaaanccaat cttatcntg tnnnaatcat 240
aggnatcctt ctttgacaa
259

```

```
<210> 400
<211> 410
<212> DNA
<213> Homo sapiens
```

<400> 400						60
ggcacgaggg	gagagcggac	cccagagagc	cctgagcagc	cccaccgcgc	ccgccgcct	120
agttaccatc	acaccccg	aggagccgca	gctgccgcag	ccggccccag	tcaccatcac	180
cgcaaccatc	agcagcggag	ccgagaccca	gcagccgcgc	gccgcccccc	ccgccgcgcc	240
ccgccctcag	cgccgccgac	accaagcccc	gcactacggg	cagcggcgca	gggagcggtg	300
gcccggggcg	cctcacatcg	gcggcgccctg	ccggcgggga	caagaaggtc	atcgcaacga	360
aggttttggg	aacagtaaaa	tggttcaatg	taaggaacgg	atatggtttc	atcaacagga	410
atgacaccaa	ggaagatgta	tttgtacacc	agactgccat	aaagaagaat		

```
<210> 401
<211> 433
<212> DNA
<213> Homo sapiens
```

```
<220>  
<221> misc_feature  
<222> (1)...(433)  
<223> n = A,T,C or G
```

[illegible]

<210> 402
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 402
 ggcacgagggc tcggactgag caggactttc cttatcccag ttgattgtgc agaatacact 60
 gcctgtcgtcgt tgtcttctat tcaccatggc ttcttctgat atccaggatga aagaactgga 120
 gaagcgtgcc tcaggccagg cttttgagct gattctcagc cctcgggtcaa aaggatctgt 180
 tccagaattc cccctttccc ctccaaagaa gaaggatctt tccctggagg aaattcagaa 240
 gaaattagaa gctgcagaag aaagacgcaa gtcccatgaa gctgaggtct tgaagcagct 300
 ggctgagaaa cgagagcacg agaaagaagt gcttcagaag gcaatagaag agaacaacaa 360
 cttcagtaaa atggcagaag agaaactgac ccacaaaatg gaagctaata aagagaaccg 420
 agaggcacia atgg 434

<210> 403
 <211> 435
 <212> DNA
 <213> Homo sapiens

<400> 403
 ggcacgagga actgctgttg ccattcaaac cattgaggag catcctgcat cttttgactg 60
 gagctctttt aagccaatgg gatttgaagt atcatttctg aagtttcttg aggagtctgc 120
 agtgaagcag aagaaaaata ctgacaaaga ccatccgaat actggaaaca aaaaaggatc 180
 ccattcaaatt tcaagaaaaa atattgataa gactgctgtg actagtggaa atcatgtatg 240
 tccttgtaaa gaaagcgaaa cgtttgtaca gtttgccaat ccatcacagc ttcagtgcag 300
 tgataatgta aaaattgttt tagacaagaa tcttaaagat tgcactgagc ttgtcttaaa 360
 gcaacttcag gaaatgaaac ctaccgtcag tctgaaaaaa cttgaagtac attcaaattga 420
 tccagatatg tctgt 435

<210> 404
 <211> 416
 <212> DNA
 <213> Homo sapiens

<400> 404
 aaagaattcgc gcacgagggc cgcgtccgcc acgaccaccg ccgcctcctg ccctgcagcc 60
 accgccaccg cctgtgtcgc cgcgcctcgc ggaccggctg tatgattagg ccacaatctt 120
 caatgagtaa acatattcct caattctgtg gtgttcttgg tcacacattt atggagtctt 180
 tgaagggcag tggagattac tgccaggcac agcacgacct ctatgcagac aagtgaactg 240
 tagaaaactga ttactgtccc accaagaagc ccccataaga gtgggtatcc tggacacaga 300
 agtggtgaat tgaaatccac agagcatttt acaagagttc tgacctggat ggggtaaac 360
 tcagtgcact tcttttctgt tggcctcagt attactggat tgaagaattg ctgctt 416

<210> 405
 <211> 435
 <212> DNA
 <213> Homo sapiens

<400> 405
 ggcacgaggg ctgccggagg gtcgttttaa agggcccgcg cgttgccgcc ccctcggccc 60
 gccatgctgc tatccgtgcc gctgtgtcgc ggctcctcgc gcctggccgt cgccgagcct 120
 gccgtctact tcaaggagca gtttctggac ggagacgggt ggacttcccg ctggatcgaa 180

```
<210> 406
<211> 424
<212> DNA
<213> Homo sapiens
```

```
<220>  
<221> misc_feature  
<222> (1)...(424)  
<223> n = A,T,C or G
```

<400> 406
gccccaaaccc actccacctt actaccagac aaccttagcc aaaccattta cccaaataaa 60
gtataggcga tagaaattga aacctggcgc aatagatata gtaccgcaag ggaaagatga 120
aaaattataa ccaagcataa tatagcaagg actaaccctt ataccttctg cataatgaat 180
taactagaaa taactttgca aggagagcca aagctaagac ccccgaaacc agacgagcta 240
cctaagaaca gctaaaagag cacaccgctc tatgtagcaa aatagtggga agatttatag 300
gtagaggcga caaacctacc gagcctggtg atagctggtt gtccaagata gaatcttagt 360
tcaactttaa atttgccac agaaccctct aaatcccctt gnaaatttaa ctgntagtcc 420
aaag

```
<210> 407
<211> 423
<212> DNA
<213> Homo sapiens
```

[illegible]

```
<210> 408
<211> 424
<212> DNA
<213> Homo sapiens
```

<400> 408
 gaaaaaaaat agcttactga attctataag atgtgtggga atctcaccta tcaaaaatag 60
 gtaaaaagag cctccaaacc tgctttgatt ttattcacct attcttttag gccaggaact 120
 aatttacctc tcactatcct gtccctctt gctatcttgt ggagtctcta aagacaaagg 180
 tataaaagagc ttttggtagg tgaattaata atcaactaga tggcatttcc aaatgggatt 240
 gcacatactg tggggcaagt cccaagtga cttcaaagt agacgtttat ttgagtaatc 300
 cttccagatt aacaataatc ataatagcag ttaccacttc ctgagtactt tctatatgcc 360
 atgtattgag cttgctcact tctttatgtg gattcttatt taatcttaat accaagatga 420

ggtg

<210> 409
<211> 398
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(398)
<223> n = A,T,C or G

<400> 409
gctcgactct tagcttgctg gggacggtaa cggggaccog gtgtctgctc ctgtcgctt 60
cgctcctaa tccctagcca ctatgcgtga gtgcatctcc atccacgttg gccaggctgg 120
tgteccagatt ggcaatgcct gctgggagct ctactgcctg gaacacggca tccagcccga 180
tggccagatg ccaagtgaca agaccattgg gggaggagat gactccttca acaccttctt 240
cagtgaagcg ggcgctggca agcacgtgcc cggggtgng tttgtagact tggaaacccac 300
agtnattgat gaagntcgna ctggcaccta cccgcaggtc ttncaccctg ancanntcat 360
nacaggcaag gaagatgctg ncaaataact atgcccga 398

<210> 410
<211> 423
<212> DNA
<213> Homo sapiens

<400> 410
gccccacccc acctgcccgc tgcggctctc cgcgggagat ctcaccgttc tggagacagg 60
gctcgctcgc tctcacgctg cccggccagc ccgcttctct gcccgagacc atgaatctca 120
gtagcgccag tagcacggag gaaaaggcag tgacgaccgt gctctggggc tgcgagctca 180
gtcaggagag gcgacttggt accttcagac cccagctgga ggggaagcag agctgcaggc 240
tgttgcttca tacgatttgc ttgggggaga aagccaaaga ggagatgcat cgcgtggaga 300
tcctgcccc agcaaaccag gaggacaaga agatgcagcc ggtcaccatt gcctcactcc 360
aggcctcagt cctccccatg gtctccatgg taggagtga gctttctccc ccagttaact 420
tcc 423

<210> 411
<211> 424
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(424)
<223> n = A,T,C or G

<400> 411
gcggaggcga ctacgggcgg cgggagcggc gccgagaggc cgtgcgggac gcgggcgcca 60
ggaccggccg aacgcagagg ttgattcttc accacactga aaccattagg aaaaatcctt 120
gtgggttaaca gcagaggctt cagagtgtaa cctgtactcg ggcctagaaa ttatttaaaa 180
tggcgactga tacgtctcaa ggtgaactcg tccatcctaa ggcactccca cttatagtag 240
gagctcagct gatccacgcg gacaagttag gtgagaaggt agaagatagc accatgccga 300
ttcgtcgaac tgtgaattct acccgggaaa ctctcccaa aagcaagctt gctgaagggg 360
aggaagaaan gccagaacca gacataagtt cagaggaatc tgtctccact gtagaagaac 420

aaga

<210> 412
 <211> 430
 <212> DNA
 <213> Homo sapiens

```

<400> 412
ggcacgaggg gaagccggcg ccagttcgcg gggctccggg ccgccactca gagctatgag 60
ctacggccgc cccctcccg atgtggaggg tatgacctcc ctcaaggtgg acaacctgac 120
ctaccgcacc tcgcccgcga cgctgagggc cgtcttcgag aagtacgggc gcgtcggcga 180
cgtgtacatc ccgcgggatc gctacaccaa ggagtcgccg ggcttcgcct tcgttcgctt 240
tcacgacaag cgcgacgctg aggacgctat ggatgccatg gacggggccg tgctggacgg 300
ccgcgagctg cgggtgcaaa tggcgcgcta cggccgcccc ccggactcac accacagccg 360
ccggggaccg ccaccccga ggtacggggg cggtggtctac ggacgccgga gccgcagccc 420
taggcggcgt                                     430
  
```

<210> 413
 <211> 429
 <212> DNA
 <213> Homo sapiens

```

<400> 413
ggcacgaggt cggcccggcc atcttggtgg aagagctgaa gcaggcgctc ttggctcggc 60
gcgccccgct gcaatccgtg gaggaacgcg ccgccgagcc accatcatgc ctgggcactt 120
acaggaaggg ttcggctgcy tggtcaccaa ccgattcgac cagttatttg acgacgaatc 180
ggaccccttc gaggtgctga aggcagcaga gaacaagaaa aaagaagccg gcggggggcg 240
cggttggggg cctggggcca agagcgcagc tcaggccgcg gccagacca actccaacgc 300
ggcaggcaaa cagctgcgca aggagtccca gaaagaccgc aagaaccgcg tgccccccag 360
cggttgccgt gttgacaaga aagaggagac gcagccgccc gtggcgctta agaaagaagg 420
aataagacg                                     429
  
```

<210> 414
 <211> 429
 <212> DNA
 <213> Homo sapiens

```

<400> 414
ggcacgagga cgggcccggc tgccggcccc cgctctgccc tgcataataa aatggctaata 60
caggtgaatg gtaatgcggt acagttaaaa gaagaggaag aaccaatgga tacttccagt 120
gtaactcaca cagaacacta caagacactg atagaggcag gcctcccaca gaaggtggca 180
gaaagacttg atgaaatatt tcagacagga ttggtagctt atgtcgatct tgatgaaaga 240
gcaattgatg ctctcagggg atttaatgaa gaaggagctc tgtctgtact acagcagttc 300
aaggaaagtg acttatcaca tgttcagaac aaaagtgcac ttttatgtgg agttatgaag 360
acctacaggc agagagagaa acaggggagc aaggtgcaag agtccacaaa gggacctgat 420
gaagcgaag                                     429
  
```

<210> 415
 <211> 398
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature

<222> (1)...(398)

<223> n = A,T,C or G

<400> 415

```
gcggtcgtaa gggctgagga tttttggtcc gcacgctcct gtcctgact caccgctgtt 60
cgctctcgcc gaggaacaag tcggtcagga agcccgcgcg caacagccat ggcttttaag 120
gataccggaa aaacacccgt ggagccggag gtggcaattc accgaattcg aatcaccccta 180
acaagccgca acgtaaaatc cttggaaaag gtgtgtgctg acttgataag aggcgcaaaa 240
gaaaagaatc tcaaagtact ttgagaatca ctacaagaaa aactccttgt ggtgaagggt 300
ctaagacgtg ggatcgtttc cagatgagaa ttcacaagcg actcattgac ttgcacagtc 360
cttctgagat tgtaagcan attacttcca tcantatt 398
```

<210> 416

<211> 269

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(269)

<223> n = A,T,C or G

<400> 416

```
gccgaggcag gaagctgtga gtgcgcggtt gcggggtcgc attgtggcta cggctttgcg 60
tccccgcgcg gcagccccag gctgggtccc gcctccgctc tccccaccgg cggggaaaagc 120
agctgggtgt ggaggaaaagg ctccatcccc cgccccctct ctcccgtgtg tggctggcan 180
gatcttttgg cagtctgtg gnctcnctcc ccgnccggat cctnctgacc ctganattcn 240
nggtntnacb nnccgtncac gccttgntt 269
```

<210> 417

<211> 408

<212> DNA

<213> Homo sapiens

<400> 417

```
ggccggggaga accgttcgcg gaggaaggc gaactagtgt tgggatggcc accaactggg 60
ggagcctctt gcaggataaa cagcagctag aggagctggc acggcaggcc gtggaccggg 120
ccctgggtga gggagtattg ctgaggacct cacaggagcc cacttcctcg gaggtggtga 180
gctatgcccc attcacgctc tccccctcac tgggtcccag tgccctgctg gagcaagcct 240
atgctgtgca gatggacttc aacctgctag tggatgctgt cagccagaac gctgccttcc 300
tggagcaaac tctttccagc accatcaaac aggatgactt taccgctcgt ctctttgaca 360
tccacaagca agtcctaaaa gagggcattg cccagactgt gttcctgg 408
```

<210> 418

<211> 402

<212> DNA

<213> Homo sapiens

<400> 418

```
gagccgggca gccgcttccc gcccccgagc aggagccggt gcgagcggag cagagccgag 60
gtcggggcgc gagcggagcc ggctgagcgg gcgccgagct cccgccatgg cccggaacac 120
gctgtcctcg cgctccgcc ggggtggacat cgacgaattt gacgagaaca aatttgtgga 180
cgagcaggag gaggcggcgg cggcggcggc ggagccaggc ccggaccgga gcgaggtgga 240
cgggtcctg cggcaagggg acatgcttcg ggcattccat gcagccttgc ggaactctcc 300
```

cgtaacacc aagaatcaag ctgtgaagga gcgagcccag ggcgtggtgc tgaaagtgc 360
 caaaaacttc aagagcagtg agattgagca ggctgtgcag tc 402

<210> 419
 <211> 406
 <212> DNA
 <213> Homo sapiens

<400> 419
 gcccgggcta gcgccctggg ttgggctttg tagctgctcc gcaggcccag cccggggccgc 60
 gctcgagag tcctaggcgg tgcgcggcct cctgcctcct ccctcctcgg cggtcgcggc 120
 ccgcccggcct ccgcggtgcc tgccttcgct ctgaggttga ggagctcaag ctggggaaaa 180
 tggtgtgcat tccttgtatc gtcattccag ttctgctctg gatctacaaa aaattcctgg 240
 agccatatat ataccctctg gtttccccct tcgttaagtc gtatatggcc taaaaaaga 300
 attcaaagaa atccaatgat ccaaacaaaa gggcaaaagt aaaaactttt aaaggggtgc 360
 aagaacattg aaatgggaat taccacaacca aaaaaggga cccaac 406

<210> 420
 <211> 371
 <212> DNA
 <213> Homo sapiens

<400> 420
 cagccatcgt ggtgtgttct tgactccgct gctcgccatg tcttctcaca agactttcag 60
 gattaagcga ttcctggcca agaaacaaaa gcaaaatcgt cccattcccc agtggattcg 120
 gatgaaaact ggaaataaaa tcaggtacaa ctccaaaagg agacattgga gaagaaccaa 180
 gctgggtcta taaggaattg cacatgagat ggcacacata tttatgctgt ctgaagggtca 240
 cgatcatgtt accatatcaa gctgaaaatg tcaccactat ctggagattt cgacgtgttt 300
 tcctctctga atctgttatg aacacgttgg ttggctggat tcagtaataa atatgtaagg 360
 ctttctttt t 371

<210> 421
 <211> 51
 <212> PRT
 <213> Homo sapiens

<400> 421
 Met Ser Ser His Lys Thr Phe Arg Ile Lys Arg Phe Leu Ala Lys Lys
 5 10 15

Gln Lys Gln Asn Arg Pro Ile Pro Gln Trp Ile Arg Met Lys Thr Gly
 20 25 30

Asn Lys Ile Arg Tyr Asn Ser Lys Arg Arg His Trp Arg Arg Thr Lys
 35 40 45

Leu Gly Leu
 50

<210> 422
 <211> 12308

<212> DNA
<213> Homo sapiens

<400> 422
 ttgttttcta gcagtgacaa gttcactttg aatcaggata tgtgtgtagt ttgtggcagt 60
 tttggccaag gagcagaagg aagattactt gcctgttctc agtgtgggtca gtgttaccat 120
 ccatactgtg tcagtattaa gatcactaaa gtggttctta gcaaagggtg gaggtgtctt 180
 gagtgcactg tgtgtgaggc ctgtgggaag gcaactgacc caggaaagact cctgctgtgt 240
 gatgactgtg acataagtta tcacacctac tgcctagacc ctccattgca gacagttccc 300
 aaaggaggct ggaagtgc aaatgtgtgt ttggtgcagac actgtggagc aacatctgca 360
 ggtctaagat gtgaatggca gaacaattac acacagtgcg ctcttctgtc aagcttatct 420
 tcctgtccag tctgctatcg aaactataga gaagaagatc ttattctgca atgtagacaa 480
 tgtgatagat ggatgcatgc agtttgtcag aacttaaata ctgaggaaga agtggaaaat 540
 gtagcagaca ttggttttga ttgtagcatg tgcagaccct atatgcctgc gtctaattgtg 600
 ccttcctcag actgctgtga atcttcactt gtagcacaaa ttgtcacaaa agtaaaagag 660
 ctagacccac ccaagactta taccaggat ggtgtgtgtt tgactgaatc agggatgact 720
 cagttacaga gcctcacagt tacagttcca agaagaaaac ggtcaaaacc aaaattgaaa 780
 ttgaagatta taaatcagaa tagcgtggcc gtccttcaga cccctccaga catccaatca 840
 gagcattcaa gggatgggtg aatggatgat agtcgagaag gagaacttat ggattgtgat 900
 ggaaaatcag aatctagtcc tgagcgggaa gctgtggatg atgaaactaa gggagtggaa 960
 ggaacagatg gtgtcaaaaa gagaaaaagg aaaccataca gaccaggtat tgggtggattt 1020
 atgggtgccc aaagaagtcg aactgggcaa gggaaaaacca aaagatctgt gatcagaaaa 1080
 gattcctcag gctctatttc cgagcagtta ccttgacagag atgatggctg gattgagcag 1140
 ttaccagata cttaggttga tgaatctgtt tctgttactg aaagcactga aaaaataaag 1200
 aagagatacc gaaaaaggaa aaataagctt gaagaaactt tccctgccta tttacaagaa 1260
 gctttctttg gaaaagatct tctagataca agtagacaaa gcaagataag tttcttggat 1320
 ctgtcagaag atggagctca gcttttatat aaaacaaaca tgaacacagg tttcttggat 1380
 ccttccttag atccactact tagttcatcc tcggctccaa caaaatctgg aactcacggt 1440
 cctgtctgat acccattagc tgatatttct gaagttttaa acacagatga tgacattctt 1500
 ggaataattt cagatgatct agcaaaatca gttgatcatt cagatattgg tctgtcact 1560
 gatgatcctt cctctttgcc tcagccaaat gtcaatcaga gttcacgacc attaagttaa 1620
 gaacagctag atgggaccc cagtcctgaa ctgacaaaaa tgggtcacaga tggagcaatt 1680
 cttggaaaaat tatataaaat tccagagctt ggcggaaaag atgttgaaga cttattttaca 1740
 gctgtactta gtctctcgaa cactcagcca actccattgc cacagcctcc cccaccaaca 1800
 cagctgttgc caatacacia tcaggatgct ttttcacgga tgcctctcat gaatggcctt 1860
 attggtacca gtctctatct cccacataat tctttgccac ctggaagcgg actgggaact 1920
 ttctctgcaa ttgcacaatc ctcttatcct gatgccaggg ataaaaattc agcctttaat 1980
 ccaatggcaa gtgatcctaa caactcttgg acatcatcag ctcccactgt ggaaggagaa 2040
 aatgacacaa tgtcgaatgc ccagagaagc acgcttaagt gggagaaaga ggaggctctg 2100
 ggtgaaatgg caactgttgc cccagttctc tacaccaata ttaatttccc caacttaaag 2160
 gaagaattcc ctgattggac tactagagtg aagcaaatg ccaaattgtg gagaaaagca 2220
 agtcacaaag aaagagcacc atatgtgcaa aaagccagag ataacagagc tgctttacgc 2280
 attaataaag tacagatgtc aaatgattcc atgaaaaggc agcaacagca agatagcatt 2340
 gatcccgact ctctgattga ttcggagctt tttaaagatc ctttaaagca aagagaatca 2400
 gaacatgaac aggaatggaa atttagacag caaatgcgtc agaaaagtaa gcagcaagct 2460
 aaaattgaag ccacacagaa acttgaacag gtgaaaaatg agcagcagca gcagcaacaa 2520
 cagcaatttg gttctcagca tcttctggtg cagtctggtt cagatacacc aagtagtggg 2580
 atacagagtc ccttgacacc tcagcctggc aatggaaaata tgtctcctgc acagtcattc 2640
 cataaagaac tgtttacaaa acagccaccc agtaccctta cgtctacatc ttcagatgat 2700
 gtgtttgtaa agccacaagc tccacctcct cctccagccc catcccggat tcccatccag 2760
 gatagtctt ctgaggctca gacttctcag ccacctcac cgcaagtgtt ttcacctggg 2820
 tctcttaact cacgaccacc atctccaatg gatccatatt caaaaatggt tggtagccct 2880
 cgaccacctc ctgtgggcca tagtttttcc agaagaaatt ctgctgcacc agtggaaaac 2940
 tgtacacctt tatcatcggt atctaggccc cttcaaatga atgagacaac agcaaatagg 3000

ccatccccctg tcagagattt atgtttcttct tccacgacaa ataatgaccc ctatgcaaaa 3060
 cctccagaca cacctaggcc tgtgatgaca gatcaatttc ccaaatoctt gggcctatcc 3120
 cggctctctg tagtttcaga acaaactgca aaaggcccta tagcagctgg aaccagtgtat 3180
 cactttacta aaccatctcc tagggcagat gtgtttcaaa gacaaaggat acctgactca 3240
 tatgcacgac ccttggtgac acctgcacct ctgtatagtg gtccctggacc ttttaagact 3300
 ccaatgcaac ctctccatc ctctcaggat ccttatggat cagtgtcaca ggcatcaagg 3360
 cgattgtctg ttgaccctta tgaaaggcct gctttgacac caagacctat agataatctt 3420
 tctcataatc agtcaaata tccatatagt cagcctcccc ttacccca tccagcagtg 3480
 aatgaatctt ttgccatcc ttcaagggtt ttttcccagc ctggaacctat atcaaggcca 3540
 acatctcagg acccatactc ccaaccccca ggaactccac gacctgttgt agattcttat 3600
 tcccaatctt caggaaacagc taggtccaat acagacctt actctcaacc tccctggaact 3660
 ccccgcccta ctactgttga cccatatagt cagcagcccc aaaccccaag accatctaca 3720
 caaactgact tgtttgttac acctgttaaca aatcagagggc attctgatcc atatgctcat 3780
 cctcctggaa caccaagacc tggaattttct gtcccttact ctcagccacc agcaacacca 3840
 aggccaaagga tttcagaggg ttttactagg tctcfaatga caagaccagt cctcatgcca 3900
 aatcaggatc ctttccctga agcagcacia aaccgaggac cagctttacc tggcccgttg 3960
 gtaaggccac ctgatacatg ttcccagaca cctaggcccc ctggacctgg tctttcagac 4020
 acatttagcc gtgtttcccc atctgtctgc cgtgatccct atgatcagtc tccaatgact 4080
 ccaagatctc agtctgactc ttttggaaac agtcaaaactg cccatgatgt tgctgatcag 4140
 ccaaggcctg gatcagaggg gagcttctgt gcatcttcaa actctccaat gcaactccaa 4200
 ggccagcagt tctctggtgt ctcccaactt cctggacctg tgccaacttc agagtaact 4260
 gatacacaga atactgtaaa tatggcccaa gcagatacag agaaattgag acagcggcag 4320
 aagttacgtg aaatcattct ccagcagcaa cagcagaaga agattgcagg tcgacaggag 4380
 aaggggtcac aggactcacc cgcagtgcct catccagggc ctcttcaaca ctggcaacca 4440
 gagaatgtta accaggcttt caccagaccc ccacctccct atcctgggaa cattaggtct 4500
 cctgttgccc ctcccttagg acctagatat gctgttttcc caaaagatca gcgtggaccc 4560
 tatcctctg atgttgctag tatggggatg agacctcatg gatttagatt tggatttcca 4620
 ggaggtagtc atggtaccat gccagtgcaa gagcgcttcc ttgtgcctcc tcagcaataa 4680
 cagggatctg gagtttctcc acagctaaga agatcagtat ctgtagatat gcctaggcct 4740
 tttaaataact cacaatgaa taatccagtt ggaacttctc agcatttttc accacagagc 4800
 ttgccagttc agcagcacia catactgggc caagcatata ttgaactgag acatagggtct 4860
 cctgacggaa ggcaacggct gcccttcagt gctccacctg gcagcgttgt agaggcatct 4920
 tctaactctga gacatggaaa cttcattccc cggccagact ttccggggcc tagacacaca 4980
 gaccccatgc gacgacctcc ccagggtcta cctaatacgc tacctgtgca cccagatttg 5040
 gaacaagtgc caccatctca acaagagcaa ggtcattctg tccattcctc ttctatggtc 5100
 atgaggactc tgaacctcc actaggtggt gaattttcag aagctccttt gtcaacatct 5160
 gtaccgtctg aaacaacgtc tgataattta cagataacca cccagccttc tgatggtcta 5220
 gaggaataac ttgattctga tgaccttctt gtgaaggaaac tggatgttaa agaccttgag 5280
 ggggttgaag tcaagactt agatgatgaa gatcttgaaa acttaaatct agatacagag 5340
 gatggcaagg tagttgaatt ggatacttta gataatttgg aaactaatga tcccaacctg 5400
 gatgacctct taaggtcagg agagtttgat atcattgcat atacagatcc agaacttgac 5460
 atgggagata agaaaagcat gtttaatgag gaactagacc ttccaattga tgataagtta 5520
 gataatcagt gtgtatctgt tgaacaaaaa aaaaaggaaac aagaaaaaaa aactctggtt 5580
 ctctctgata aacattcacc acagaaaaaa tccactgtta ccaatgaggt aaaaacggaa 5640
 gtactgtctc caaattctaa ggtggaatcc aaatgtgaaa ctgaaaaaaa aaatgatgga 5700
 aaagataatg ttgacctcc ttgtcacag gcttctgctc actcagacct aaatgatgga 5760
 gaaaagactt ctttgcatcc ttgtgatcca gatctatttg agaaaagaa caatcgagaa 5820
 actgctggcc ccagtgcaaa tgtcattcag gcattccact aactacctgc tcaagatgta 5880
 ataaactctt gtggcataac tggatcaact ccagtttact tgctaattgag 5940
 aaatctgata attcagacat taggccatcg ggtctccac caccaccaac tctgccggcc 6000
 tccccatcca atcatgtgtc aagtttgctc cctttcatag caccgcctgg ccgtgttttg 6060
 gataatgcca tgaattctaa tgtgacagta gtctctaggg taaacctagt tttttctcag 6120
 ggtgtgcagg taaacccagg gctcattcca ggtcaatcaa cagttaacca cagtctgggg 6180
 acaggaaaac ctgcaactca aactgggcct caaacaagtc agtctggtac cagtagcatg 6240

tctggacccc aacagctaata gattcctcaa acattagcac agcagaatag agagaggccc 6300
cttcttctag aagaacagcc tctacttcta caggatcttt tggatcaaga aaggcaagaa 6360
cagcagcagc aaagacagat gcaagccatg attcgtcagc gatcagaacc gttcttccct 6420
aatattgatt ttgatgcaat tacagatcct ataataaag ccaaaatggt ggcccttaaa 6480
ggtataaata aagtgatggc acaaaacaat ctgggcatgc caccaatggt gatgagcagg 6540
ttccctttta tgggccagggt ggtaactgga acacagaaca gtgaaggaca gaaccttgga 6600
ccacaggcca ttccctcagga tggcagtata acacatcaga tttctaggcc taatcctcca 6660
aattttggtc caggctttgt caatgattca cagcgtaagc agtatgaaga gtggctccag 6720
gagaccaaac agctgcttca aatgcagcag aagtatcttg aagaacaaat tgggtgctac 6780
agaaaatcta agaaggccct ttcagctaaa caactgactg ccaagaaagc tgggcgtgaa 6840
tttccagagg aagatgcaga acaactcaag catgttactg aacagcaaag catggttcag 6900
aaacagctag aacagattcg taaacaacag aaagaacatg ctgaattgat tgaagattat 6960
cggatcaaac agcagcagca atgtgcaatg gccccaccta ccatgatgcc cagtgtccag 7020
ccccagccac ccctaattcc aggtgccact ccaccacca tgagccaacc cacttttccc 7080
atggtgccac agcagcttca gcaccagcag cacacaacag ttatttctgg ccatactagc 7140
cctgttagaa tggccagttt acctggatgg caaccaacaa gtgctcctgc ccacctgccc 7200
ctcaatcctc ctagaattca gcccccaatt gccagttac caataaaaaac ttgtacacca 7260
gccccaggga cagtctcaaa tgcaaatcca cagagtggac caccacctcg ggtagaattt 7320
gatgacaaca atcccttttag tgaaagtitt caagaacggg aacgtaagga acgtttacga 7380
gaacagcaag agagacaacg gatccaactc atgcaggagg tagatagaca aagagctttg 7440
cagcagagga tggaaatgga gcagcatggt atgggtgggt ctgagataag tagtagtagg 7500
acatctgtgt cccagattcc cttctacagt tccgacttac cttgtgattt tatgcaacct 7560
ctaggacccc ttcagcagtc tccacaacac caacagcaaa tggggcagggt tttacagcag 7620
cagaatatac aacaaggatc aattaattca ccctccacc aaactttcat gcagactaat 7680
gagcgaaggc aggtaggccc tccctcattt gttcctgatt caccatcaat cctgttgga 7740
agcccaaatt tttcttctgt gaagcaggga catggaaatc tttctgggac cagcttccag 7800
cagtcctccag tttaggcctc ttttacacct gctttaccag cagcacctcc agtagctaat 7860
agcagctctcc catgtggcca agattctact ataaccatg gacacagtta tccgggatca 7920
accaatcgc tcattcagtt gtattctgat ataatcccag aggaaaaagg gaaaaagaaa 7980
agaacaagaa agaagaaaag accgactcca ggcacccaag ccaaggctcc atcaactccc 8040
cattcagata taactgcccc tctcaacaa cctatgtacag aactacctc tactcctgca 8100
gtgagcacac ccagtgaagt agcaggccag ctatgtacag aatagagaa caaactgccc 8160
ccatccactc ccaatatggc aactccaaat caacagacgt atgcaaattc agaagtagac 8220
aatagtatt tctcacaagc aactccaaat caacagacgt aactggaaaa ggctgagaca 8280
aagctctcca tggaaaaccc tgccaaaaca gaagagataa aagtggtag taaggtagaa 8340
gagtcctgcc taggccaaga ggagcctaaa ttggaggaaac agaattgtag tggctggggc 8400
ggaaacgctg cagcctgtcc tgtctcctca gcacagagtc ctccccattc tgctggggcc 8460
cctgctgcca aaggagactc aggggaatgaa cttctgaaac acttggtgaa aaataaaaaag 8520
tcatcttctc ttttgaatca aaaacctgag ggcagtattt gttcagaaga tgactgtaca 8580
aaggataata aactagttga gaagcagaac ccagctgaag gactgcaaac tttgggggct 8640
caaagtcaag gtggttttgg atgtggcaac cagttgcca aaacagatgg aggaagtga 8700
accaagaaac agcgaagcaa acggactcag aggacgggtg agaaagcagc acctcgctca 8760
aagaaaagga aaaaggacga agaggagaaa caagctatgt actctagcac tgacacgttt 8820
accacttga aacaggtgag gcagctctct ctgctccctc taatggaacc aatcattgga 8880
gtgaactttg cgcactttct tccctatggc agtggccaat ttaatagtgg gaatcgactt 8940
ctaggaactt ttggcagtc taccctggaa ggggtttcgg actactattc tcagttgatc 9000
tacaagcaga ataatttaag taatcctcca acacccccctg cctctcttcc tccacacca 9060
cctcctatgg cttgtcagaa gatggccaat ggttttgcaa caactgaaga acttgctgga 9120
aaagccggag tgttagtgag ccatgaagtt accaaaactc taggacctaa accatttcag 9180
ctgcccttca gacccagga cgacttggtg gcccgagctc ttgctcaggg cccaagaca 9240
gttgatgtgc cagcctccct cccaacacca cctcataaca atcaggaaga attaaggata 9300
caggatcact gtggtgatcg agatactcct gacagttttg ttccctcatc ctctcctgag 9360
agtgtggttg gggtagaagt gagcaggtat ccagatctgt cattggtcaa ggaggagcct 9420
ccagaaccgg tgccgtcccc catcattcca attcttcta gcaactgctg gaaaagtcca 9480

gaatcaagaa ggaatgacat caaaactgag ccaggcactt tatattttgc gtcacctttt 9540
 ggtccttccc caaatggtcc cagatcaggt cttatatctg tagcaattac tctgcatcct 9600
 acagctgctg agaacattag cagtgttggt gctgcatctt ccgaccttct tcacgtccga 9660
 atccctaaca gctatgaggt tagcagtgtt ccagatgtcc catccatggg tttggctcagt 9720
 agccacagaa tcaaccctggg tttggagtat cgacagcatt tacttctccg tgggcctccg 9780
 ccaggatctg caaacctccc cagattagtg agctcttacc ggctgaagca gcctaattga 9840
 ccatttcctc caacaagcaa tgggtcttct ggatataagg attctagtca tgggtattga 9900
 gaaagcgcag cactcagacc acagtgggtg tgtcattgta aagtgggtat tcttggaagt 9960
 ggtgtgcgga aatctttcaa agatctgacc cttttgaaca aggattcccg agaaagcacc 10020
 actgcacaag cgaaaaactc agaaaacaag gaatccattc cttcattgcc acaatcacct 10140
 atgagagaaa cgccttccaa agcatttcat cagtacagca acaacatctc cactttggat 10200
 gtgcactgtc tccccagct cccagagaaa gcttctcccc ctgcctcacc acccatcgcc 10260
 ttccctcctg cttttgaagc agcccaagtc gaggccaaagc cagatgagct gaaggtgaca 10320
 gtcaagctga agcctcggct aagagctgtc catgggtgggt ttgaagattg caggccgctc 10380
 aataaaaaat ggagaggaat gaaatggaag aagtggagca ttcattattgt aatccctaag 10440
 gggacattta aaccaccttg tgaggatgaa atagatgaat ttctaaagaa attgggcact 10500
 tcccttaaac ctgatcctgt gcccaaagac tatcggaat gttgcttttg tcatgaagaa 10560
 ggtgatggat tgacagatgg accagcaagg ctactcaacc ttgacttga tctgtgggtc 10620
 cacttgaact gcgctctgtg gtccacggag gtctatgaga ctcaggctgg tgcttaata 10680
 aatgtggagc tagctctgag gagaggcta caaatgaaat gtgtcttctg tcacaagacg 10740
 ggtgccacta gtggatgcca cagatttcca tgcaccaaca tttatcactt cacttgcgcc 10800
 attaaagcac aatgcatgtt ttttaaggac aaaactatgc tttgccccat gcacaaacca 10860
 aagggaaatc atgagcaaga attaagttac tttgcagtct tcaggagggt ctatgttcag 10920
 cgtgatgagg tgcgacagat tgctagcatc gtgcaacgag gagaacggga ccataccttt 10980
 cgcgtgggta gectcatctt ccacacaatt ggtcagctgc ttccacagca gatgcaagca 11040
 ttccattctc cttaaagcact ctccctctgt ggctatgaag ccagccggct gtactggagc 11100
 actcgtatg ccaataggcg ctgccgtac ctgtgtcca ttgaggagaa ggatgggcgc 11160
 ccagtgtttg tcatcaggat tgtggaacaa ggccatgaag acctggttct aagtgcacac 11220
 tcacctaag gtgtctggga taagattttg gagcctgtgg catgtgtgag aaaaaagtct 11280
 gaaatgctcc agcttttccc agcgtattta aaaggagagg atctgttttg cctgaccgtc 11340
 tctgcagtgg cagcatagc ggaatcactt cctggggtg aggcattgtga aaattatacc 11400
 ttccgatacg gccgaaatcc tctcatggaa ctccctcttg ccgttaaccc cacaggttgt 11460
 gcccgttctg aacctaaaat gagtccccat gtcaagaggc ctcacacctt aaacagcacc 11520
 agcacctcaa agtcatttca gagcacagtc actggagaac tgaacgcacc ttatagttaa 11580
 cagtttgttc actccaagtc atcgcagtag cggaagatga aaactgaatg gaaatccaat 11640
 gtgtatctgg caggtctctg gattcagggg ctgggcctgt atgctgctcg agacattgag 11700
 aaacacacca tggtcattga gtacatcggg actatcattc gaaacgaagt agccaacagg 11760
 aaagagaagc tttatgagtc tcagaaccgt ggtgtgtaca tgttccgcat ggataacgac 11820
 catgtgattg acgcgacgct cacaggaggg cccgcaaggt atatcaacca ttcgtgtgca 11880
 cctaattgtg tggctgaagt ggtgactttt gagagaggac acaaaaattat catcagctcc 11940
 agtcggagaa tccagaaagg agaagagctc tgctatgact ataagtttga ctttgaagat 12000
 gaccagcaca agattccgtg tcaactgtga gctgtgaact gccggaagtg gatgaactga 12060
 aatgcattoc ttgctagctc agcgggcggc ttgtccctag gaagaggcga ttcaacacac 12120
 cattggaatt ttgcagacag aaagagattt ttgtttctg ttttatgact ttttgaaaaa 12180
 gcttctggga gttctgattt cctcagtcct ttaggttaaa gcagcgccag gaggaagctg 12240
 acagaagcag cgttcttgaa gtggccgagg ttaaacggaa tcacagaatg gtccagcact 12300
 tttgcttt 12308

<210> 423

<211> 596

<212> DNA

<213> Homo sapiens

<400> 423
 ggccggtgaa ggaccgagag gccttccaga ggtcgaactt cctgtaccag gtgagtctgc 60
 gacaaggggcc ccacggggac ggtgctcggc gtcccagagt gactgctccc ctcccgcagg 120
 ccgcccattg tgtccttgcc caggaccccg agaaccaggc gctggcgagg ttttactgct 180
 aactgagag gaccattgag aagcggctcg tcttgccggc ggatccctcg gtgaagagga 240
 ctctctgtcg aggctgctct tccctcctcg tcccgggcct cacctgcacc caccgccaga 300
 gacgctgcag gggacagcgc tggaccgtac agacctgcct aacatgccag cgcagccaac 360
 gcttctcaa tgatcccggg catttactct ggggagacag gcctgaggcc cagctcggga 420
 gccaagcaga ttccaaacca ctacaaccct tgccaaacac agcccactcc atttcagacc 480
 gccttctga ggagaaaatg cagactcagg gttccagtaa ccagtgatgg attcacccca 540
 tctcccaaat aaagtctact tgttttacat tcaaaaaaaa aaaaaaaaaa ctcgag 596

<210> 424
 <211> 1549
 <212> DNA
 <213> Homo sapiens

<400> 424
 tgtgagaccg ccaagatggt ggtgggagcg ttccttatgg cgaagctgct atacttgggc 60
 atccggcagg tcagcaagcc gcttgccaac cgtattaagg aggcgccccg ccgaagcgag 120
 ttcttcaaga cctatatctg cctcccgcgg gctcaactgt atcactgggt ggagatgcgg 180
 accaagatgc gcatcatggg cttccggggc acggctcatca agccgctgaa cgaggaggcg 240
 gcagccgagc tgggagcaga gctgctgggc gaagccacca tottcatcgt gggcgggcggc 300
 tgcctagtgc tggagtactg gcgccaccag gcgcagcagc gccacaagga ggaggagcag 360
 cgtgctgcct ggaacgcgct gcgggacgag gtgggcccacc tggcgctggc gctggaagcg 420
 ctgcaggcgc aggtgcaggc ggccggcgcca caggggcgccc tggaggaact gcgcacagag 480
 ctgcaagagg tgogcgccca gctctgcaat cccggccggg ccgcttccca cgcagtgcct 540
 gcgtccaaga aataggagct tgctggatgg aacctgaatt tggacatggc ctatgtacct 600
 aacgtggcct tcttcccga ccacccttgc ctgctgctggc ccagtggaaa ccaccaggat 660
 cttgatgcaa cttggcattt ggttaccctt gctgataaga gcagccatta cctgccactg 720
 ggaccagcag gtgaagcggt gcaacatagc cccctccatc atccttcacc tcttatcccc 780
 cactccaaac caggacgacc tgcaagggtc cagccagcag gacaccgtgg gcaactctggc 840
 aaatgaaaaa atggaacctg gtcttgagct gaatcaatgt gttattgtta cccccacccc 900
 cgggtttacct gatcagtgtt aaacctttact gggacactca totgttacac tggaaacact 960
 tcttcttttt gtcaatcggc acagaccact gtaaggaaat gcagtgtgtt gcagtggcct 1020
 tttctcccco tcaccttcta aggtcagctc tagctgagca tcagtgtctt ctttaaggagg 1080
 aaaaaaacgg tgcggctggg agcgggtggc cacgcctgta atcctagcac cttgggaggc 1140
 cgaggcgggc ggatcacttg aggtcaggag ttccagacca gcctggccaa catgggtgaaa 1200
 ctccgtctct actaaaaata caaaaattag ccgggtgtgg tggggtgcgc ttgtaatccc 1260
 agctactcgg gaggtgagg caggagaatt gcttgaacct atgaggtgga ggttgcggtg 1320
 agccaagatg gcaccattgc accctagcct gggcaacaga gcaagacacc gtcttaaac 1380
 caaaaagttaa ccgggcgtgg tgggtgggtgc ctgtaatcct agctacttgg gaggctgagg 1440
 caggagaatt gcttgaactt gggaggtgga ggccaagatt gtaccactgt attccagccc 1500
 ggggtgacaga gcaagactgt gtctcaaaaa aaaaaaaaaa aaactcgag 1549

<210> 425
 <211> 4019
 <212> PRT
 <213> Homo sapiens

<400> 425
 Leu Phe Ser Ser Ser Asp Lys Phe Thr Leu Asn Gln Asp Met Cys Val
 5 10 15

Val Cys Gly Ser Phe Gly Gln Gly Ala Glu Gly Arg Leu Leu Ala Cys
 20 25 30
 Ser Gln Cys Gly Gln Cys Tyr His Pro Tyr Cys Val Ser Ile Lys Ile
 35 40 45
 Thr Lys Val Val Leu Ser Lys Gly Trp Arg Cys Leu Glu Cys Thr Val
 50 55 60
 Cys Glu Ala Cys Gly Lys Ala Thr Asp Pro Gly Arg Leu Leu Leu Cys
 65 70 75 80
 Asp Asp Cys Asp Ile Ser Tyr His Thr Tyr Cys Leu Asp Pro Pro Leu
 85 90 95
 Gln Thr Val Pro Lys Gly Gly Trp Lys Cys Lys Trp Cys Val Trp Cys
 100 105 110
 Arg His Cys Gly Ala Thr Ser Ala Gly Leu Arg Cys Glu Trp Gln Asn
 115 120 125
 Asn Tyr Thr Gln Cys Ala Pro Cys Ala Ser Leu Ser Ser Cys Pro Val
 130 135 140
 Cys Tyr Arg Asn Tyr Arg Glu Glu Asp Leu Ile Leu Gln Cys Arg Gln
 145 150 155 160
 Cys Asp Arg Trp Met His Ala Val Cys Gln Asn Leu Asn Thr Glu Glu
 165 170 175
 Glu Val Glu Asn Val Ala Asp Ile Gly Phe Asp Cys Ser Met Cys Arg
 180 185 190
 Pro Tyr Met Pro Ala Ser Asn Val Pro Ser Ser Asp Cys Cys Glu Ser
 195 200 205
 Ser Leu Val Ala Gln Ile Val Thr Lys Val Lys Glu Leu Asp Pro Pro
 210 215 220
 Lys Thr Tyr Thr Gln Asp Gly Val Cys Leu Thr Glu Ser Gly Met Thr
 225 230 235 240
 Gln Leu Gln Ser Leu Thr Val Thr Val Pro Arg Arg Lys Arg Ser Lys
 245 250 255
 Pro Lys Leu Lys Leu Lys Ile Ile Asn Gln Asn Ser Val Ala Val Leu
 260 265 270
 Gln Thr Pro Pro Asp Ile Gln Ser Glu His Ser Arg Asp Gly Glu Met
 275 280 285
 Asp Asp Ser Arg Glu Gly Glu Leu Met Asp Cys Asp Gly Lys Ser Glu
 290 295 300

Ser Ser Pro Glu Arg Glu Ala Val Asp Asp Glu Thr Lys Gly Val Glu
 305 310 315 320
 Gly Thr Asp Gly Val Lys Lys Arg Lys Arg Lys Pro Tyr Arg Pro Gly
 325 330 335
 Ile Gly Gly Phe Met Val Arg Gln Arg Ser Arg Thr Gly Gln Gly Lys
 340 345 350
 Thr Lys Arg Ser Val Ile Arg Lys Asp Ser Ser Gly Ser Ile Ser Glu
 355 360 365
 Gln Leu Pro Cys Arg Asp Asp Gly Trp Ser Glu Gln Leu Pro Asp Thr
 370 375 380
 Leu Val Asp Glu Ser Val Ser Val Thr Glu Ser Thr Glu Lys Ile Lys
 385 390 395 400
 Lys Arg Tyr Arg Lys Arg Lys Asn Lys Leu Glu Glu Thr Phe Pro Ala
 405 410 415
 Tyr Leu Gln Glu Ala Phe Phe Gly Lys Asp Leu Leu Asp Thr Ser Arg
 420 425 430
 Gln Ser Lys Ile Ser Leu Asp Asn Leu Ser Glu Asp Gly Ala Gln Leu
 435 440 445
 Leu Tyr Lys Thr Asn Met Asn Thr Gly Phe Leu Asp Pro Ser Leu Asp
 450 455 460
 Pro Leu Leu Ser Ser Ser Ser Ala Pro Thr Lys Ser Gly Thr His Gly
 465 470 475 480
 Pro Ala Asp Asp Pro Leu Ala Asp Ile Ser Glu Val Leu Asn Thr Asp
 485 490 495
 Asp Asp Ile Leu Gly Ile Ile Ser Asp Asp Leu Ala Lys Ser Val Asp
 500 505 510
 His Ser Asp Ile Gly Pro Val Thr Asp Asp Pro Ser Ser Leu Pro Gln
 515 520 525
 Pro Asn Val Asn Gln Ser Ser Arg Pro Leu Ser Glu Glu Gln Leu Asp
 530 535 540
 Gly Ile Leu Ser Pro Glu Leu Asp Lys Met Val Thr Asp Gly Ala Ile
 545 550 555 560
 Leu Gly Lys Leu Tyr Lys Ile Pro Glu Leu Gly Gly Lys Asp Val Glu
 565 570 575
 Asp Leu Phe Thr Ala Val Leu Ser Pro Ala Asn Thr Gln Pro Thr Pro
 580 585 590

Leu Pro Gln Pro Pro Pro Pro Thr Gln Leu Leu Pro Ile His Asn Gln
 595 600 605
 Asp Ala Phe Ser Arg Met Pro Leu Met Asn Gly Leu Ile Gly Ser Ser
 610 615 620
 Pro His Leu Pro His Asn Ser Leu Pro Pro Gly Ser Gly Leu Gly Thr
 625 630 635 640
 Phe Ser Ala Ile Ala Gln Ser Ser Tyr Pro Asp Ala Arg Asp Lys Asn
 645 650 655
 Ser Ala Phe Asn Pro Met Ala Ser Asp Pro Asn Asn Ser Trp Thr Ser
 660 665 670
 Ser Ala Pro Thr Val Glu Gly Glu Asn Asp Thr Met Ser Asn Ala Gln
 675 680 685
 Arg Ser Thr Leu Lys Trp Glu Lys Glu Glu Ala Leu Gly Glu Met Ala
 690 695 700
 Thr Val Ala Pro Val Leu Tyr Thr Asn Ile Asn Phe Pro Asn Leu Lys
 705 710 715 720
 Glu Glu Phe Pro Asp Trp Thr Thr Arg Val Lys Gln Ile Ala Lys Leu
 725 730 735
 Trp Arg Lys Ala Ser Ser Gln Glu Arg Ala Pro Tyr Val Gln Lys Ala
 740 745 750
 Arg Asp Asn Arg Ala Ala Leu Arg Ile Asn Lys Val Gln Met Ser Asn
 755 760 765
 Asp Ser Met Lys Arg Gln Gln Gln Gln Asp Ser Ile Asp Pro Ser Ser
 770 775 780
 Arg Ile Asp Ser Glu Leu Phe Lys Asp Pro Leu Lys Gln Arg Glu Ser
 785 790 795 800
 Glu His Glu Gln Glu Trp Lys Phe Arg Gln Gln Met Arg Gln Lys Ser
 805 810 815
 Lys Gln Gln Ala Lys Ile Glu Ala Thr Gln Lys Leu Glu Gln Val Lys
 820 825 830
 Asn Glu Gln Gln Gln Gln Gln Gln Gln Phe Gly Ser Gln His Leu
 835 840 845
 Leu Val Gln Ser Gly Ser Asp Thr Pro Ser Ser Gly Ile Gln Ser Pro
 850 855 860
 Leu Thr Pro Gln Pro Gly Asn Gly Asn Met Ser Pro Ala Gln Ser Phe
 865 870 875 880

His Lys Glu Leu Phe Thr Lys Gln Pro Pro Ser Thr Pro Thr Ser Thr
 885 890 895
 Ser Ser Asp Asp Val Phe Val Lys Pro Gln Ala Pro Pro Pro Pro Pro
 900 905 910
 Ala Pro Ser Arg Ile Pro Ile Gln Asp Ser Leu Ser Gln Ala Gln Thr
 915 920 925
 Ser Gln Pro Pro Ser Pro Gln Val Phe Ser Pro Gly Ser Ser Asn Ser
 930 935 940
 Arg Pro Pro Ser Pro Met Asp Pro Tyr Ala Lys Met Val Gly Thr Pro
 945 950 955 960
 Arg Pro Pro Pro Val Gly His Ser Phe Ser Arg Arg Asn Ser Ala Ala
 965 970 975
 Pro Val Glu Asn Cys Thr Pro Leu Ser Ser Val Ser Arg Pro Leu Gln
 980 985 990
 Met Asn Glu Thr Thr Ala Asn Arg Pro Ser Pro Val Arg Asp Leu Cys
 995 1000 1005
 Ser Ser Ser Thr Thr Asn Asn Asp Pro Tyr Ala Lys Pro Pro Asp Thr
 1010 1015 1020
 Pro Arg Pro Val Met Thr Asp Gln Phe Pro Lys Ser Leu Gly Leu Ser
 1025 1030 1035 1040
 Arg Ser Pro Val Val Ser Glu Gln Thr Ala Lys Gly Pro Ile Ala Ala
 1045 1050 1055
 Gly Thr Ser Asp His Phe Thr Lys Pro Ser Pro Arg Ala Asp Val Phe
 1060 1065 1070
 Gln Arg Gln Arg Ile Pro Asp Ser Tyr Ala Arg Pro Leu Leu Thr Pro
 1075 1080 1085
 Ala Pro Leu Asp Ser Gly Pro Gly Pro Phe Lys Thr Pro Met Gln Pro
 1090 1095 1100
 Pro Pro Ser Ser Gln Asp Pro Tyr Gly Ser Val Ser Gln Ala Ser Arg
 1105 1110 1115 1120
 Arg Leu Ser Val Asp Pro Tyr Glu Arg Pro Ala Leu Thr Pro Arg Pro
 1125 1130 1135
 Ile Asp Asn Phe Ser His Asn Gln Ser Asn Asp Pro Tyr Ser Gln Pro
 1140 1145 1150
 Pro Leu Thr Pro His Pro Ala Val Asn Glu Ser Phe Ala His Pro Ser
 1155 1160 1165

1165
 1155
 1145
 1140
 1135
 1130
 1125
 1120
 1115
 1110
 1105
 1100
 1095
 1090
 1085
 1080
 1075
 1070
 1065
 1060
 1055
 1050
 1045
 1040
 1035
 1030
 1025
 1020
 1015
 1010
 1005
 1000
 995
 990
 985
 980
 975
 970
 965
 960
 955
 950
 945
 940
 935
 930
 925
 920
 915
 910
 905
 900
 895
 890
 885

Arg Ala Phe Ser Gln Pro Gly Thr Ile Ser Arg Pro Thr Ser Gln Asp
 1170 1175 1180
 Pro Tyr Ser Gln Pro Pro Gly Thr Pro Arg Pro Val Val Asp Ser Tyr
 1185 1190 1195 1200
 Ser Gln Ser Ser Gly Thr Ala Arg Ser Asn Thr Asp Pro Tyr Ser Gln
 1205 1210 1215
 Pro Pro Gly Thr Pro Arg Pro Thr Thr Val Asp Pro Tyr Ser Gln Gln
 1220 1225 1230
 Pro Gln Thr Pro Arg Pro Ser Thr Gln Thr Asp Leu Phe Val Thr Pro
 1235 1240 1245
 Val Thr Asn Gln Arg His Ser Asp Pro Tyr Ala His Pro Pro Gly Thr
 1250 1255 1260
 Pro Arg Pro Gly Ile Ser Val Pro Tyr Ser Gln Pro Pro Ala Thr Pro
 1265 1270 1275 1280
 Arg Pro Arg Ile Ser Glu Gly Phe Thr Arg Ser Ser Met Thr Arg Pro
 1285 1290 1295
 Val Leu Met Pro Asn Gln Asp Pro Phe Leu Gln Ala Ala Gln Asn Arg
 1300 1305 1310
 Gly Pro Ala Leu Pro Gly Pro Leu Val Arg Pro Pro Asp Thr Cys Ser
 1315 1320 1325
 Gln Thr Pro Arg Pro Pro Gly Pro Gly Leu Ser Asp Thr Phe Ser Arg
 1330 1335 1340
 Val Ser Pro Ser Ala Ala Arg Asp Pro Tyr Asp Gln Ser Pro Met Thr
 1345 1350 1355 1360
 Pro Arg Ser Gln Ser Asp Ser Phe Gly Thr Ser Gln Thr Ala His Asp
 1365 1370 1375
 Val Ala Asp Gln Pro Arg Pro Gly Ser Glu Gly Ser Phe Cys Ala Ser
 1380 1385 1390
 Ser Asn Ser Pro Met His Ser Gln Gly Gln Gln Phe Ser Gly Val Ser
 1395 1400 1405
 Gln Leu Pro Gly Pro Val Pro Thr Ser Gly Val Thr Asp Thr Gln Asn
 1410 1415 1420
 Thr Val Asn Met Ala Gln Ala Asp Thr Glu Lys Leu Arg Gln Arg Gln
 1425 1430 1435 1440
 Lys Leu Arg Glu Ile Ile Leu Gln Gln Gln Gln Lys Lys Ile Ala
 1445 1450 1455

Gly Arg Gln Glu Lys Gly Ser Gln Asp Ser Pro Ala Val Pro His Pro
 1460 1465 1470
 Gly Pro Leu Gln His Trp Gln Pro Glu Asn Val Asn Gln Ala Phe Thr
 1475 1480 1485
 Arg Pro Pro Pro Pro Tyr Pro Gly Asn Ile Arg Ser Pro Val Ala Pro
 1490 1495 1500
 Pro Leu Gly Pro Arg Tyr Ala Val Phe Pro Lys Asp Gln Arg Gly Pro
 1505 1510 1515 1520
 Tyr Pro Pro Asp Val Ala Ser Met Gly Met Arg Pro His Gly Phe Arg
 1525 1530 1535
 Phe Gly Phe Pro Gly Gly Ser His Gly Thr Met Pro Ser Gln Glu Arg
 1540 1545 1550
 Phe Leu Val Pro Pro Gln Gln Ile Gln Gly Ser Gly Val Ser Pro Gln
 1555 1560 1565
 Leu Arg Arg Ser Val Ser Val Asp Met Pro Arg Pro Leu Asn Asn Ser
 1570 1575 1580
 Gln Met Asn Asn Pro Val Gly Leu Pro Gln His Phe Ser Pro Gln Ser
 1585 1590 1595 1600
 Leu Pro Val Gln Gln His Asn Ile Leu Gly Gln Ala Tyr Ile Glu Leu
 1605 1610 1615
 Arg His Arg Ala Pro Asp Gly Arg Gln Arg Leu Pro Phe Ser Ala Pro
 1620 1625 1630
 Pro Gly Ser Val Val Glu Ala Ser Ser Asn Leu Arg His Gly Asn Phe
 1635 1640 1645
 Ile Pro Arg Pro Asp Phe Pro Gly Pro Arg His Thr Asp Pro Met Arg
 1650 1655 1660
 Arg Pro Pro Gln Gly Leu Pro Asn Gln Leu Pro Val His Pro Asp Leu
 1665 1670 1675 1680
 Glu Gln Val Pro Pro Ser Gln Gln Glu Gln Gly His Ser Val His Ser
 1685 1690 1695
 Ser Ser Met Val Met Arg Thr Leu Asn His Pro Leu Gly Gly Glu Phe
 1700 1705 1710
 Ser Glu Ala Pro Leu Ser Thr Ser Val Pro Ser Glu Thr Thr Ser Asp
 1715 1720 1725
 Asn Leu Gln Ile Thr Thr Gln Pro Ser Asp Gly Leu Glu Glu Lys Leu
 1730 1735 1740

1460
 1475
 1490
 1505
 1525
 1540
 1555
 1570
 1585
 1605
 1620
 1635
 1650
 1665
 1685
 1700
 1715
 1730

Asp Ser Asp Asp Pro Ser Val Lys Glu Leu Asp Val Lys Asp Leu Glu 1745
 1750 1755 1760
 Gly Val Glu Val Lys Asp Leu Asp Asp Glu Asp Leu Glu Asn Leu Asn 1765
 1770 1775
 Leu Asp Thr Glu Asp Gly Lys Val Val Glu Leu Asp Thr Leu Asp Asn 1780
 1785 1790
 Leu Glu Thr Asn Asp Pro Asn Leu Asp Asp Leu Leu Arg Ser Gly Glu 1795
 1800 1805
 Phe Asp Ile Ile Ala Tyr Thr Asp Pro Glu Leu Asp Met Gly Asp Lys 1810
 1815 1820
 Lys Ser Met Phe Asn Glu Glu Leu Asp Leu Pro Ile Asp Asp Lys Leu 1825
 1830 1835 1840
 Asp Asn Gln Cys Val Ser Val Glu Pro Lys Lys Lys Glu Gln Glu Asn 1845
 1850 1855
 Lys Thr Leu Val Leu Ser Asp Lys His Ser Pro Gln Lys Lys Ser Thr 1860
 1865 1870
 Val Thr Asn Glu Val Lys Thr Glu Val Leu Ser Pro Asn Ser Lys Val 1875
 1880 1885
 Glu Ser Lys Cys Glu Thr Glu Lys Asn Asp Glu Asn Lys Asp Asn Val 1890
 1895 1900
 Asp Thr Pro Cys Ser Gln Ala Ser Ala His Ser Asp Leu Asn Asp Gly 1905
 1910 1915 1920
 Glu Lys Thr Ser Leu His Pro Cys Asp Pro Asp Leu Phe Glu Lys Arg 1925
 1930 1935
 Thr Asn Arg Glu Thr Ala Gly Pro Ser Ala Asn Val Ile Gln Ala Ser 1940
 1945 1950
 Thr Gln Leu Pro Ala Gln Asp Val Ile Asn Ser Cys Gly Ile Thr Gly 1955
 1960 1965
 Ser Thr Pro Val Leu Ser Ser Leu Leu Ala Asn Glu Lys Ser Asp Asn 1970
 1975 1980
 Ser Asp Ile Arg Pro Ser Gly Ser Pro Pro Pro Pro Thr Leu Pro Ala 1985
 1990 1995 2000
 Ser Pro Ser Asn His Val Ser Ser Leu Pro Pro Phe Ile Ala Pro Pro 2005
 2010 2015
 Gly Arg Val Leu Asp Asn Ala Met Asn Ser Asn Val Thr Val Val Ser 2020
 2025 2030

Arg Val Asn His Val Phe Ser Gln Gly Val Gln Val Asn Pro Gly Leu
 2035 2040 2045
 Ile Pro Gly Gln Ser Thr Val Asn His Ser Leu Gly Thr Gly Lys Pro
 2050 2055 2060
 Ala Thr Gln Thr Gly Pro Gln Thr Ser Gln Ser Gly Thr Ser Ser Met
 2065 2070 2075 2080
 Ser Gly Pro Gln Gln Leu Met Ile Pro Gln Thr Leu Ala Gln Gln Asn
 2085 2090 2095
 Arg Glu Arg Pro Leu Leu Leu Glu Glu Gln Pro Leu Leu Leu Gln Asp
 2100 2105 2110
 Leu Leu Asp Gln Glu Arg Gln Glu Gln Gln Gln Arg Gln Met Gln
 2115 2120 2125
 Ala Met Ile Arg Gln Arg Ser Glu Pro Phe Phe Pro Asn Ile Asp Phe
 2130 2135 2140
 Asp Ala Ile Thr Asp Pro Ile Met Lys Ala Lys Met Val Ala Leu Lys
 2145 2150 2155 2160
 Gly Ile Asn Lys Val Met Ala Gln Asn Asn Leu Gly Met Pro Pro Met
 2165 2170 2175
 Val Met Ser Arg Phe Pro Phe Met Gly Gln Val Val Thr Gly Thr Gln
 2180 2185 2190
 Asn Ser Glu Gly Gln Asn Leu Gly Pro Gln Ala Ile Pro Gln Asp Gly
 2195 2200 2205
 Ser Ile Thr His Gln Ile Ser Arg Pro Asn Pro Pro Asn Phe Gly Pro
 2210 2215 2220
 Gly Phe Val Asn Asp Ser Gln Arg Lys Gln Tyr Glu Glu Trp Leu Gln
 2225 2230 2235 2240
 Glu Thr Gln Gln Leu Leu Gln Met Gln Gln Lys Tyr Leu Glu Glu Gln
 2245 2250 2255
 Ile Gly Ala His Arg Lys Ser Lys Lys Ala Leu Ser Ala Lys Gln Arg
 2260 2265 2270
 Thr Ala Lys Lys Ala Gly Arg Glu Phe Pro Glu Glu Asp Ala Glu Gln
 2275 2280 2285
 Leu Lys His Val Thr Glu Gln Gln Ser Met Val Gln Lys Gln Leu Glu
 2290 2295 2300
 Gln Ile Arg Lys Gln Gln Lys Glu His Ala Glu Leu Ile Glu Asp Tyr
 2305 2310 2315 2320

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000

Arg Ile Lys Gln Gln Gln Gln Cys Ala Met Ala Pro Pro Thr Met Met
2325 2330 2335

Pro Ser Val Gln Pro Gln Pro Pro Leu Ile Pro Gly Ala Thr Pro Pro
2340 2345 2350

Thr Met Ser Gln Pro Thr Phe Pro Met Val Pro Gln Gln Leu Gln His
2355 2360 2365

Gln Gln His Thr Thr Val Ile Ser Gly His Thr Ser Pro Val Arg Met
2370 2375 2380

Pro Ser Leu Pro Gly Trp Gln Pro Asn Ser Ala Pro Ala His Leu Pro
2385 2390 2395 2400

Leu Asn Pro Pro Arg Ile Gln Pro Pro Ile Ala Gln Leu Pro Ile Lys
2405 2410 2415

Thr Cys Thr Pro Ala Pro Gly Thr Val Ser Asn Ala Asn Pro Gln Ser
2420 2425 2430

Gly Pro Pro Pro Arg Val Glu Phe Asp Asp Asn Asn Pro Phe Ser Glu
2435 2440 2445

Ser Phe Gln Glu Arg Glu Arg Lys Glu Arg Leu Arg Glu Gln Gln Glu
2450 2455 2460

Arg Gln Arg Ile Gln Leu Met Gln Glu Val Asp Arg Gln Arg Ala Leu
2465 2470 2475 2480

Gln Gln Arg Met Glu Met Glu Gln His Gly Met Val Gly Ser Glu Ile
2485 2490 2495

Ser Ser Ser Arg Thr Ser Val Ser Gln Ile Pro Phe Tyr Ser Ser Asp
2500 2505 2510

Leu Pro Cys Asp Phe Met Gln Pro Leu Gly Pro Leu Gln Gln Ser Pro
2515 2520 2525

Gln His Gln Gln Gln Met Gly Gln Val Leu Gln Gln Gln Asn Ile Gln
2530 2535 2540

Gln Gly Ser Ile Asn Ser Pro Ser Thr Gln Thr Phe Met Gln Thr Asn
2545 2550 2555 2560

Glu Arg Arg Gln Val Gly Pro Pro Ser Phe Val Pro Asp Ser Pro Ser
2565 2570 2575

Ile Pro Val Gly Ser Pro Asn Phe Ser Ser Val Lys Gln Gly His Gly
2580 2585 2590

Asn Leu Ser Gly Thr Ser Phe Gln Gln Ser Pro Val Arg Pro Ser Phe
2595 2600 2605

Thr Pro Ala Leu Pro Ala Ala Pro Pro Val Ala Asn Ser Ser Leu Pro
 2610 2615 2620
 Cys Gly Gln Asp Ser Thr Ile Thr His Gly His Ser Tyr Pro Gly Ser
 2625 2630 2635 2640
 Thr Gln Ser Leu Ile Gln Leu Tyr Ser Asp Ile Ile Pro Glu Glu Lys
 2645 2650 2655
 Gly Lys Lys Lys Arg Thr Arg Lys Lys Lys Arg Asp Asp Ala Glu
 2660 2665 2670
 Ser Thr Lys Ala Pro Ser Thr Pro His Ser Asp Ile Thr Ala Pro Pro
 2675 2680 2685
 Thr Pro Gly Ile Ser Glu Thr Thr Ser Thr Pro Ala Val Ser Thr Pro
 2690 2695 2700
 Ser Glu Leu Pro Gln Gln Ala Asp Gln Glu Ser Val Glu Pro Val Gly
 2705 2710 2715 2720
 Pro Ser Thr Pro Asn Met Ala Ala Gly Gln Leu Cys Thr Glu Leu Glu
 2725 2730 2735
 Asn Lys Leu Pro Asn Ser Asp Phe Ser Gln Ala Thr Pro Asn Gln Gln
 2740 2745 2750
 Thr Tyr Ala Asn Ser Glu Val Asp Lys Leu Ser Met Glu Thr Pro Ala
 2755 2760 2765
 Lys Thr Glu Glu Ile Lys Leu Glu Lys Ala Glu Thr Glu Ser Cys Pro
 2770 2775 2780
 Gly Gln Glu Glu Pro Lys Leu Glu Glu Gln Asn Gly Ser Lys Val Glu
 2785 2790 2795 2800
 Gly Asn Ala Val Ala Cys Pro Val Ser Ser Ala Gln Ser Pro Pro His
 2805 2810 2815
 Ser Ala Gly Ala Pro Ala Ala Lys Gly Asp Ser Gly Asn Glu Leu Leu
 2820 2825 2830
 Lys His Leu Leu Lys Asn Lys Lys Ser Ser Ser Leu Leu Asn Gln Lys
 2835 2840 2845
 Pro Glu Gly Ser Ile Cys Ser Glu Asp Asp Cys Thr Lys Asp Asn Lys
 2850 2855 2860
 Leu Val Glu Lys Gln Asn Pro Ala Glu Gly Leu Gln Thr Leu Gly Ala
 2865 2870 2875 2880
 Gln Met Gln Gly Gly Phe Gly Cys Gly Asn Gln Leu Pro Lys Thr Asp
 2885 2890 2895

Gly Gly Ser Glu Thr Lys Lys Gln Arg Ser Lys Arg Thr Gln Arg Thr
 2900 2905 2910
 Gly Glu Lys Ala Ala Pro Arg Ser Lys Lys Arg Lys Lys Asp Glu Glu
 2915 2920 2925
 Glu Lys Gln Ala Met Tyr Ser Ser Thr Asp Thr Phe Thr His Leu Lys
 2930 2935 2940
 Gln Val Arg Gln Leu Ser Leu Leu Pro Leu Met Glu Pro Ile Ile Gly
 2945 2950 2955 2960
 Val Asn Phe Ala His Phe Leu Pro Tyr Gly Ser Gly Gln Phe Asn Ser
 2965 2970 2975
 Gly Asn Arg Leu Leu Gly Thr Phe Gly Ser Ala Thr Leu Glu Gly Val
 2980 2985 2990
 Ser Asp Tyr Tyr Ser Gln Leu Ile Tyr Lys Gln Asn Asn Leu Ser Asn
 2995 3000 3005
 Pro Pro Thr Pro Pro Ala Ser Leu Pro Pro Thr Pro Pro Pro Met Ala
 3010 3015 3020
 Cys Gln Lys Met Ala Asn Gly Phe Ala Thr Thr Glu Glu Leu Ala Gly
 3025 3030 3035 3040
 Lys Ala Gly Val Leu Val Ser His Glu Val Thr Lys Thr Leu Gly Pro
 3045 3050 3055
 Lys Pro Phe Gln Leu Pro Phe Arg Pro Gln Asp Asp Leu Leu Ala Arg
 3060 3065 3070
 Ala Leu Ala Gln Gly Pro Lys Thr Val Asp Val Pro Ala Ser Leu Pro
 3075 3080 3085
 Thr Pro Pro His Asn Asn Gln Glu Glu Leu Arg Ile Gln Asp His Cys
 3090 3095 3100
 Gly Asp Arg Asp Thr Pro Asp Ser Phe Val Pro Ser Ser Ser Pro Glu
 3105 3110 3115 3120
 Ser Val Val Gly Val Glu Val Ser Arg Tyr Pro Asp Leu Ser Leu Val
 3125 3130 3135
 Lys Glu Glu Pro Pro Glu Pro Val Pro Ser Pro Ile Ile Pro Ile Leu
 3140 3145 3150
 Pro Ser Thr Ala Gly Lys Ser Ser Glu Ser Arg Arg Asn Asp Ile Lys
 3155 3160 3165
 Thr Glu Pro Gly Thr Leu Tyr Phe Ala Ser Pro Phe Gly Pro Ser Pro
 3170 3175 3180

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000

Cys Arg Pro Leu Asn Lys Lys Trp Arg Gly Met Lys Trp Lys Lys Trp
3460 3465 3470

Ser Ile His Ile Val Ile Pro Lys Gly Thr Phe Lys Pro Pro Cys Glu
 3475 3480 3485
 Asp Glu Ile Asp Glu Phe Leu Lys Lys Leu Gly Thr Ser Leu Lys Pro
 3490 3495 3500
 Asp Pro Val Pro Lys Asp Tyr Arg Lys Cys Cys Phe Cys His Glu Glu
 3505 3510 3515 3520
 Gly Asp Gly Leu Thr Asp Gly Pro Ala Arg Leu Leu Asn Leu Asp Leu
 3525 3530 3535
 Asp Leu Trp Val His Leu Asn Cys Ala Leu Trp Ser Thr Glu Val Tyr
 3540 3545 3550
 Glu Thr Gln Ala Gly Ala Leu Ile Asn Val Glu Leu Ala Leu Arg Arg
 3555 3560 3565
 Gly Leu Gln Met Lys Cys Val Phe Cys His Lys Thr Gly Ala Thr Ser
 3570 3575 3580
 Gly Cys His Arg Phe Arg Cys Thr Asn Ile Tyr His Phe Thr Cys Ala
 3585 3590 3595 3600
 Ile Lys Ala Gln Cys Met Phe Phe Lys Asp Lys Thr Met Leu Cys Pro
 3605 3610 3615
 Met His Lys Pro Lys Gly Ile His Glu Gln Glu Leu Ser Tyr Phe Ala
 3620 3625 3630
 Val Phe Arg Arg Val Tyr Val Gln Arg Asp Glu Val Arg Gln Ile Ala
 3635 3640 3645
 Ser Ile Val Gln Arg Gly Glu Arg Asp His Thr Phe Arg Val Gly Ser
 3650 3655 3660
 Leu Ile Phe His Thr Ile Gly Gln Leu Leu Pro Gln Gln Met Gln Ala
 3665 3670 3675 3680
 Phe His Ser Pro Lys Ala Leu Phe Pro Val Gly Tyr Glu Ala Ser Arg
 3685 3690 3695
 Leu Tyr Trp Ser Thr Arg Tyr Ala Asn Arg Arg Cys Arg Tyr Leu Cys
 3700 3705 3710
 Ser Ile Glu Glu Lys Asp Gly Arg Pro Val Phe Val Ile Arg Ile Val
 3715 3720 3725
 Glu Gln Gly His Glu Asp Leu Val Leu Ser Asp Ile Ser Pro Lys Gly
 3730 3735 3740
 Val Trp Asp Lys Ile Leu Glu Pro Val Ala Cys Val Arg Lys Lys Ser
 3745 3750 3755 3760

Glu Met Leu Gln Leu Phe Pro Ala Tyr Leu Lys Gly Glu Asp Leu Phe
3765 3770 3775

Gly Leu Thr Val Ser Ala Val Ala Arg Ile Ala Glu Ser Leu Pro Gly
3780 3785 3790

Val Glu Ala Cys Glu Asn Tyr Thr Phe Arg Tyr Gly Arg Asn Pro Leu
3795 3800 3805

Met Glu Leu Pro Leu Ala Val Asn Pro Thr Gly Cys Ala Arg Ser Glu
3810 3815 3820

Pro Lys Met Ser Ala His Val Lys Arg Pro His Thr Leu Asn Ser Thr
3825 3830 3835 3840

Ser Thr Ser Lys Ser Phe Gln Ser Thr Val Thr Gly Glu Leu Asn Ala
3845 3850 3855

Pro Tyr Ser Lys Gln Phe Val His Ser Lys Ser Ser Gln Tyr Arg Lys
3860 3865 3870

Met Lys Thr Glu Trp Lys Ser Asn Val Tyr Leu Ala Arg Ser Arg Ile
3875 3880 3885

Gln Gly Leu Gly Leu Tyr Ala Ala Arg Asp Ile Glu Lys His Thr Met
3890 3895 3900

Val Ile Glu Tyr Ile Gly Thr Ile Ile Arg Asn Glu Val Ala Asn Arg
3905 3910 3915 3920

Lys Glu Lys Leu Tyr Glu Ser Gln Asn Arg Gly Val Tyr Met Phe Arg
3925 3930 3935

Met Asp Asn Asp His Val Ile Asp Ala Thr Leu Thr Gly Gly Pro Ala
3940 3945 3950

Arg Tyr Ile Asn His Ser Cys Ala Pro Asn Cys Val Ala Glu Val Val
3955 3960 3965

Thr Phe Glu Arg Gly His Lys Ile Ile Ile Ser Ser Ser Arg Arg Ile
3970 3975 3980

Gln Lys Gly Glu Glu Leu Cys Tyr Asp Tyr Lys Phe Asp Phe Glu Asp
3985 3990 3995 4000

Asp Gln His Lys Ile Pro Cys His Cys Gly Ala Val Asn Cys Arg Lys
4005 4010 4015

Trp Met Asn

<210> 426

<211> 174

```
<400> 426
Pro Val Lys Asp Arg Glu Ala Phe Gln Arg Leu Asn Phe Leu Tyr Gln
          5              10              15
```

Val Ser Leu Arg Gln Gly Pro His Gly Asp Gly Ala Arg Arg Pro Arg
20 25 30

Val Thr Ala Pro Leu Pro Gln Ala Ala His Cys Val Leu Ala Gln Asp
35 40 45

Pro Glu Asn Gln Ala Leu Ala Arg Phe Tyr Cys Tyr Thr Glu Arg Thr
50 55 60

Ile Ala Lys Arg Leu Val Leu Arg Arg Asp Pro Ser Val Lys Arg Thr
65 70 75 80

Leu Cys Arg Gly Cys Ser Ser Leu Leu Val Pro Gly Leu Thr Cys Thr
85 90 95

His Arg Gln Arg Arg Cys Arg Gly Gln Arg Trp Thr Val Gln Thr Cys
100 105 110

Leu Thr Cys Gln Arg Ser Gln Arg Phe Leu Asn Asp Pro Gly His Leu
115 120 125

Leu Trp Gly Asp Arg Pro Glu Ala Gln Leu Gly Ser Gln Ala Asp Ser
130 135 140

Lys Pro Leu Gln Pro Leu Pro Asn Thr Ala His Ser Ile Ser Asp Arg
145 150 155 160

Leu Pro Glu Glu Lys Met Gln Thr Gln Gly Ser Ser Asn Gln
165 170

```
<210> 427
<211> 184
<212> PRT
<213> Homo sapiens
```

<400> 427
Cys Glu Thr Ala Lys Met Val Val Gly Ala Phe Pro Met Ala Lys Leu
 5 10 15

Leu Tyr Leu Gly Ile Arg Gln Val Ser Lys Pro Leu Ala Asn Arg Ile
20 25 30

Lys Glu Ala Ala Arg Arg Ser Glu Phe Phe Lys Thr Tyr Ile Cys Leu
35 40 45

Pro Pro Ala Gln Leu Tyr His Trp Val Glu Met Arg Thr Lys Met Arg

50

55

60

Ile Met Gly Phe Arg Gly Thr Val Ile Lys Pro Leu Asn Glu Glu Ala
65 70 75 80

Ala Ala Glu Leu Gly Ala Glu Leu Leu Gly Glu Ala Thr Ile Phe Ile
85 90 95

Val Gly Gly Gly Cys Leu Val Leu Glu Tyr Trp Arg His Gln Ala Gln
100 105 110

Gln Arg His Lys Glu Glu Glu Gln Arg Ala Ala Trp Asn Ala Leu Arg
115 120 125

Asp Glu Val Gly His Leu Ala Leu Ala Leu Glu Ala Leu Gln Ala Gln
130 135 140

Val Gln Ala Ala Pro Pro Gln Gly Ala Leu Glu Glu Leu Arg Thr Glu
145 150 155 160

Leu Gln Glu Val Arg Ala Gln Leu Cys Asn Pro Gly Arg Ser Ala Ser
165 170 175

His Ala Val Pro Ala Ser Lys Lys
180

<210> 428

<211> 6476

<212> DNA

<213> Homo sapiens

<400> 428

cactgactgg actgaaaaca gggccaagaa aactgctgct gcaggggggc ctgaaaacag 60
ctggaacccg gcagtgatgt gggacctaac ttgaagttaa cctgtggtgg tgaggttgga 120
accagttgga ttatgattta ttttctacac tctgtacgg aatgcagagc tgttgatcc 180
tgatgaatct actgctaaat atagtcattt ggaataattt taagtattga tcttaaaact 240
tgtaccacaa caagagtgtc taaaaagcac ggcaagctca ttacgttctt acgaacattc 300
atgaagtctc gtccaacaaa acagaagctg aagcagcggg gaatcttgaa agagaggggtg 360
tttggttggtg acctggggga gcaccttcta aattctggtt ttgaagtgcc gcagttcttc 420
aaagctgcac agcattcatt gagagatatg gcatcgtgga tggaaatctat cgcctttctg 480
gtgttgccctc caatatccag agactacgcc atgaatttga ctctgagcac gtccccgacc 540
tgacgaaaga accgtatgtt caggacatcc attctgtggg ttccctatgt aagctgtact 600
tccgggaact cccaaaccct ctgcttacct accagctgta tgagaaattt tctgatgcag 660
tttcagcagc aacagatgaa gaaaggctga taaaaatcca cgatgtcatc cagcagctcc 720
ccccaccaca ctacagaaca ctggagttcc tgatgagaca cttgtctctt ctagctgact 780
attgttccat cacaaatatg catgcaaaaa atctagcaat tgtttgggct ccaaacctgt 840
taagatcaaa acagatagaa tctgcctgct tcagtggaaac agcagctttc atggaagtga 900
ggattcagtc tgtggttggt gagttcatcc tgaatcacgt tgatgtgctg ttcagcgga 960
gaatcagcat ggccatgcaa gagggggcag cttctctatc aaggcccaag tccctcctgg 1020

tatcctctcc	atccacaaaa	ctgctgacat	tggaagagggc	ccaggcacga	acacaagctc	1080
aggtcaattc	tccaattgtg	acggaaaaata	aatatatcga	agtaggagaa	ggacctgctg	1140
cacttcaggg	gaaatttcat	accataattg	agttcccact	tgaaagaaag	aggcctcaaa	1200
ataagatgaa	aaagtctcct	gtgggtagct	ggcgttcctt	tttcaacttg	gggaaatcat	1260
catctgtttc	taaacgaaaag	ctgcagcgga	atgagagtga	gccttcagag	atgaaagcca	1320
tggctctgaa	aggtggcagg	gcagaaggaa	ccctccggtc	agctaaaagt	gaggagtctc	1380
ttacatctct	ccatgcagtt	gatggtgatt	ctaagctctt	ccgaccaga	agaccagat	1440
cttcagtgga	tgactgtct	gcctctttta	atggagaaat	gctggggaac	cgctgtaact	1500
cctatgataa	tctgcctcat	gacaatgaga	gtgaggagga	aggagggtg	cttcatatcc	1560
cagcccttat	gtctcctcat	tcagctgagg	atgttgactt	gagccacca	gacattggag	1620
tagccagcct	ggattttgat	ccaatgtcat	ttcaatgtag	tcctcctaag	gccgaatcag	1680
aatgtctgga	gagtgtgtct	tccttttttag	attcaccagg	atactccaag	gataaaccaa	1740
gtgccaataa	aaaggatgca	gaaacaggta	gtagccaatg	tcagactcca	ggaagcacag	1800
caagctctga	acctgtctct	cctcttcagg	agaaactgag	tccattcttt	accctggact	1860
tgagcccaac	tgaagataaa	tcatctaagc	catcctcctt	tactgaaaag	gtcgtctatg	1920
ctttctctcc	gaagatagga	cggaaattaa	gcaaatcacc	ttctatgagc	atatctgagc	1980
caatttcagt	gaccctacca	ccacgggtgt	cagaagtcat	tggtacagtc	tcaaatacca	2040
cagctcagaa	tgcatcatct	tcaacctggg	acaaatgcgt	tgaagaaagg	gatgccacaa	2100
atagatcccc	caccagata	gtaaaagatga	aaacaaatga	gacagttgcc	caagaagcat	2160
atgaatctga	agtccagccc	ctggaccagg	tggtgctgga	agaagtagaa	ttgccaggga	2220
aagaggatca	gtctgtctca	agcagtcaga	gtaaggctgt	agcttctgga	cagactcaga	2280
caggagcagt	tacccatgac	ccccctcagg	attccgttcc	tgctcagttca	gtctctctta	2340
tcccaccacc	accgctccg	aaaaatgttg	cccgaatgtt	ggcgctagca	ttagctgagt	2400
ccgcacagca	agcctcaact	cagtcattga	agagaccagg	gacctctcag	gctgggtata	2460
caaattatgg	agacatagcg	gtggctacaa	ctgaagataa	tctgtccagt	tcttactctg	2520
cagttgctct	agataaggcc	tatttccaaa	ccgatcgacc	agcagagcag	ttccacctcc	2580
agaataatgc	accaggaaac	tgtgaccatc	ctctaccaga	gacaacagct	actggggatc	2640
ctacccattc	caacacaact	gaatctgggg	agcaacatca	ccaagtagac	ttaacaggga	2700
atcagccaca	tcaagcatat	ttatctgggg	accagaaaaa	ggccagaatt	acttcagttc	2760
ccttagactc	agagaagtct	gatgatcatg	taagtttccc	tgaagaccag	tctgggaaga	2820
acagtatgcc	aactgtctcc	ttcttgatc	aggaccagtc	tccaccccgt	ttctacagt	2880
gagatcagcc	tccttcttat	cttgggtcaa	gtgtggataa	actccatcac	cctttagaat	2940
ttgcagacaa	atctcccaca	cctccctaatt	tacctagcga	taaaatctac	cctccttctg	3000
ggtccccga	agagaatacc	agcacagcca	ccatgactta	catgacaact	actccagcaa	3060
cagcccaaat	gagcaccaag	gaagccagct	gggatgtggc	tgaacaaccc	accactgctg	3120
attttgctgc	tgccacactt	cagcgcacgc	acagaactaa	tcgtccccct	ccccctccgc	3180
cttcccagag	atctgcagag	cagccaccag	ttgtggggca	ggtacaagca	gcaaccaata	3240
taggattaaa	taattccac	aaggttcaag	gagtagttcc	agttccagag	aggccacctg	3300
aacctcgagc	catggatgac	cctgcgtctg	ccttcatcag	tgacagtgg	gctgctgctg	3360
ctcagtgtcc	catggctaca	gctgtccagc	caggcctgcc	tgagaaaagt	cgggacgggtg	3420
cccggtccc	gctgctgcac	ctgcgcgccg	agtctgtccc	tgcgcatccc	tgtggctttc	3480
ctgcaccact	gccccccacc	aggatgatgg	agagtaagat	gattgctgcc	atacactcca	3540
gcagtgcaga	tgccaccagc	agttcaaatt	atcattcctt	tgtcactgct	tcattccacct	3600
ctgtggacga	tgcatgtcct	ttaccacttc	ctgtcccaca	acctaagcat	gcttctcaga	3660
aaacagttta	ctcctccttt	gctaggcccg	atgtcaccac	tgaacccttt	gggtccagata	3720
actgtttgca	tttcaatgat	actccaaact	gccagtaccg	tcccagagt	gtacctcccc	3780
atcacataaa	attggagcag	caccaagtgt	atggtgccag	gtcagagcca	ccagcctcca	3840
tgggtcttcg	ttataacaca	tatgtggccc	caggaagaaa	cgcactctgga	caccactcca	3900
agccatgcag	ccgggtcgag	tatgtgtctt	ctttgagctc	ctctgtcagg	aatacctgtt	3960
accccgaa	cattccaccg	taccctacca	tccggagagt	gcagtctctc	catgctccgc	4020
cgtcttccat	gattcgctct	gttcccattt	cacggacaga	agttccccca	gatgatgagc	4080
cagcctactg	cccaagacct	ctgtaccaat	ataagccata	tcagtccctc	caggcccgt	4140
cagattatca	tgctactcag	cttcagcctt	actttgagaa	tggccgggtc	cactacaggt	4200
atagcccata	ttccagttct	tctagttcct	attacagtcc	agatggggcc	ctgtgtgatg	4260

tggatgccta tggcacagtc cagttgagac cccttcaccg ccttcccaat cgagactttg 4320
 ctttctacaa tcctaggctg caaggaaaga gcttgtagag ttatgctggt ttggctccac 4380
 gtccccgggc caacgtgact ggctatttct ctcccaacga ccataatgta gtcagcatgc 4440
 ctccggctgc tgatgtgaag cacacctaca cctcatggga tcttgaggac atggaaaaat 4500
 accgcatgca gtccatccgg agagagagcc gtgctcggca gaaggtgaaa gggcctgtca 4560
 tgtcccaata tgataacatg accccggcgg tgcaggacga cttgggtggg atctatgtca 4620
 tccatctgcg tagtaaatca gatacctggga aaactggact tctctcagtg gcagaaggaa 4680
 aggagagccg ccatgcagcc aaggccatca gtcccagggg agaggaccgc ttctatagga 4740
 ggcattcccga ggcagagatg gacagagccc accatcacgg aggccatggt agcacgcagc 4800
 cggagaagcc atccctgcct cagaagcaga gcagcctgag gagcaggaag cttcctgaca 4860
 tgggctgcag tcttccctgag cacagggcac accaagaagc aagccatagg cagttctgtg 4920
 agtcaaagaa tgggccccct tatccccagg gagctggcca gttagattat ggggtccaaag 4980
 ggattccaga cacttctgag ccagtcagct accacaactc tggagtataa tatgctgcat 5040
 ccgggcaaga atctttaaga ctgaaccaca aagaggtaag gctctccaaa gagatggagc 5100
 gaccctgggt taggcagcct tctgccccag agaactcctc cagagactgc tacaaggagg 5160
 aagaacacct cactcagtc atcgtcccac cccctaaacc agagaggagt catagcctca 5220
 aactccatca taccagaac gtggagaggg accccagtgt gctgtaccag taccaaccac 5280
 acggcaagcg ccagagcagt gtgactgttg tgtcccagta tgataacctg gaagattacc 5340
 actccctgcc tcagcaccag cgaggagtct ttggaggggg cggcatgggg acgtatgtgc 5400
 cccctggctt tccccatcca cagagcagga cctatgtctac agcgttgggt caaggggcct 5460
 tctgcccgc agagttgtcc ttgcagcatc ctgaaacaca gatccatgca gaatgagccc 5520
 tgcgagcaat agagttgaag cagcctctgc tggacagtgg actgttctat ttttttcaat 5580
 aaccaaaaag attaaacaaa aaatactata aaaccctga ccacatttaa aaaatgataa 5640
 taaaagtaaa caaatcagca tctttttccc cttccctgct tcattacccc ctcttccatc 5700
 tatagacttt gtcatttttg tcttttagaaa agatctgaag gatggttaaag ccccggtgctg 5760
 aaaccagta gagaaacctg tctcaggaca cacttgccat ctagggctag cttgaaagag 5820
 cctgaggact gcctttaact gaatttgaat tcagcattgt cctttcttct tagtatttgc 5880
 tgcataattg agagcagttc acatcgattt cctggtaggc gtctgcattc cctgttgtgt 5940
 tctgcttct ccttcagtag ctgcacaact tgcgcagatc gacacactgt tgtaacttca 6000
 ttctccccgt ctgagaagga tcttgtgttc agttagagtc gtggaaaaat cctgatcct 6060
 tcaaggtcag tcagacagtt ggcaacatta taattaaaaa taagaaatta agactttaaa 6120
 ttaaactatt ggtagagtca tcataaaaca ccagaccact tagactcagg ctgaaccata 6180
 ctctttctat tcttattttt catccttggt cctcacggtt cagtgaacag gctcatatca 6240
 tgacagaatg gacttttaaa agttagtact taaggaaact tctttaggtg gaagaaagta 6300
 aagttcttat tgtcagtgaa ctttatttag accagaaatc tctattgatg cttttaatgc 6360
 attgcctgcc ttcagggttt cttcttacc caccctcaa taagatttgg tgaattgtaa 6420
 ttctagtaaa acatgtcata ccattgggtt tctaaatta tcaactttct ttcatt 6476

<210> 429

<211> 732

<212> DNA

<213> Homo sapiens

<400> 429

tgggatttgg tctctttgac taatcaccaa aaagcaacca actcctccga ctcttccctg 60
 gcttcaacct tagctggggc tgcagcagca gagcgagcag ctgtggtggc agcagcaacg 120
 gggcagcagc acaaaggcag atggatcagc caagaaggcc ttgacctttt cagcaagtgg 180
 gaaggtgtaa tccgtctcca cagacaaggc caggaccggc gtcaaagggtg aagcaggaca 240
 tgctcccgcc ggggggctat gggcccatcg actacaaacg gaacttgccg cgtcgaggac 300
 tgtcgggcta cagcatgctg gccatagggg ttggaaccct gatctacggg cactggagca 360
 taatgaagtg gaaccgtgag cgcaggcgcc tacaatcga ggacttcgag gctcgcatcg 420
 cgctgttgcc actgttacag gcagaaaccg accggaggac cttgcagatg cttcgggaga 480
 acctggagga ggaggccatc atcatgaagg acgtgcccga ctggaagggtg ggggagctgt 540
 tgttccacac aaccgcgtgg gtgccccctt tgatcgggga gctgtacggg ctgcgcacca 600

cagaggaggc tctccatgcc agccacggct tcatgtggta cacgtaggcc ctgtgccctc 660
 cggccacctg gatccctgcc cctccccact gggacggaat aaatgctctg cagacctgaa 720
 aaaaaaaaaa aa 732

<210> 430
 <211> 2843
 <212> DNA
 <213> Homo sapiens

<400> 430
 gcgggcccag gaggcggcgg cgggcggcggc ggacggggccc cccgcggcag acggcgagga 60
 cggacaggac ccgcacagca agcacctgta cacggccgac atgttcacgc acgggatcca 120
 gagcgccgcg cacttcgtca tgttcttcgc gccctgggtg ggacactgcc agcggctgca 180
 gccgacttgg aatgacctgg gagacaaata caacagcatg gaagatgcca aagtctatgt 240
 ggctaaagtg gactgcacgg cccactccga cgtgtgctcc gcccaggggg tgcgaggata 300
 cccacacctta aagcttttca agccaggcca agaagctgtg aagtaccagg gtcctcggga 360
 cttccagaca ctggaaaaact ggatgctgca gacactgaac gaggagccag tgacaccaga 420
 gccggaagtg gaaccgcccga gtgccccga gctcaagcaa gggctgtatg agctctcagc 480
 aagcaacttt gagctgcacg ttgcacaagg cgaccacttt atcaagttct tcgctccgtg 540
 gtgtgggtcac tgcaaaagccc tggctccaac ctgggagcag ctggctctgg gccttgaaca 600
 ttccgaaact gtcaagattg gcaaggttga ttgtacacag cactatgaac tctgctccgg 660
 aaaccagggt cgtggctatc ccaactcttct ctgggtccga gatgggaaaa aggtggatca 720
 gtacaaggga aagcgggatt tggagtcact gagggagtag gtggagtcgc agctgcagcg 780
 cacagagact ggagcgacgg agaccgtcac gccctcagag gcccgggtgc tggcagctga 840
 gcccgaggct gacaagggca ctgtgttggc actcactgaa aatactttcg atgacaccat 900
 tgcaagaagg ataaccttca tcaagtttta tgctccatgg tgtggtcatt gtaagactct 960
 ggctcctact tgggaggaac tctctaaaaa ggaattccct ggtctggcgg gggtaagat 1020
 cgccgaagta gactgcactg ctgaacggaa tatctgcagc aagtattcgg tacgaggcta 1080
 cccacagtta ttgcttttcc gaggagggaa gaaagtcagt gagcacagtg gaggcagaga 1140
 ccttgactcg ttacaccgct ttgtcctgag ccaagcgaaa gacgaacttt aggaacacag 1200
 ttggagggtca cctctcctgc ccagctcccg caccctgcgt ttaggagttc agtcccacag 1260
 aggccactgg gttcccagtg gtggctgttc agaaagcaga acatactaag cgtgaggtat 1320
 cttctttgtg ttgtgtgttt ccaagccaac acaactctaca gattctttat taagtttaagt 1380
 ttctctaagt aaatgtgtaa ctcatgggtca ctgtgtaaac attttccagt gcgatatatc 1440
 ccctttgacc ttctcttgat gaaattttaca tggtttccct tgagactaaa atagcgttga 1500
 gggaaatgaa attgtctggc tatttgtggc tcctgagttg agtgattttg gtgaaagaaa 1560
 gcacatccaa agcatagttt acctgcccac gagttctgga aagggtggcct tgtggcagta 1620
 ttgacgttcc tctgatctta aggtcacagt tgactcaata ctgtgttggc ccgtagcatg 1680
 gagcagattg aaatgcaaaa acccacacct ctggaagata ccttcacggc cgctgctgga 1740
 gcttctgttg ctgtgaatac ttctctcagt gtgagagggt agccgtgatg aaagcagcgt 1800
 tacttctgac cgtgcctgag taagagaatg ctgatgccat aactttatgt gtcgatactt 1860
 gtcaaatcag ttactgttca ggggatccct ctgtttctca cggggtgaaa catgtcttta 1920
 gttcctcatg ttaacacgaa gccagagccc acatgaactg ttggatgtct tccttagaaa 1980
 gggtaggcat ggaaaattcc acgaggtcca ttctcagtat ctcatctaact cattgaaaga 2040
 ttccagttgt atttgtcacc tggggtgaca agaccagaca ggctttccca ggcttggtga 2100
 tccagggagg ctctgcagcc ctgctgaagg gccctaacta gaggttctaga gtttctgatt 2160
 ctgtttctca gtagtccttt tagaggcttg ctatacttgg tctgcttcaa ggaggctcag 2220
 cttctaattg atgaagaatg ggaatgcatt gatctcaaga ccaaagacag atgtcagtg 2280
 gctgctctgg cctggtgtg cagggtgtg gcagctgttg atgccagtg cctctaactc 2340
 atgctgtcct tgtgattaaa cacctctatc tcccttggga ataagcacat acaggcttaa 2400
 gctctaagat agataggtgt ttgtcctttt accatcgagc tacttcccat aataaccact 2460
 ttgcatccaa cactcttcac ccacctccca tacgcaaggg gatgtggata cttggcccaa 2520
 agtaactggt ggtaggaatc ttagaaacaa gaccacttat actgtctgtc tgaggcagaa 2580
 gataacagca gcatctcgac cagcctctgc cttaaaggaa atctttatta atcacgtatg 2640

```

gttcacagat aattcttttt ttaaaaaaac ccaacctcct agagaagcac aactgtcaag 2700
agtcttgtag acacaacttc agctttgcat cacgagtcct gtattccaag aaaatcaaag 2760
tggtagaatt tgtttgttta cactatgata ctttctaatt aaactctttt ttttaaaaaa 2820
aaaaaaaaaa aaaaaaactc gag                                     2843

```

<210> 431
 <211> 640
 <212> DNA
 <213> Homo sapiens

```

<400> 431
ggtaacgtta tagtatttgt cagaagttgg ggtctccgtg ggcattgtga tccgtcccag 60
gcagtggatt aggaggccag aaggagatcc cttccacggg gctaggctga gatggatcct 120
ctcagggccc aacagctggc tgcggagctg gaggtggaga tgatggccga tatgtacaac 180
agaatgacca gtgcctgcca ccggaagtgt gtgcctcctc actacaagga agcagagctc 240
tccaagggcg agtctgtgtg cctggaccga tgtgtctcta agtacctgga catccatgag 300
cggatgggca aaaagttgac agagttgtct atgcaggatg aagagctgat gaagaggggtg 360
cagcagagct ctgggcctgc atgaggtccc tgtcagtata caccctgggg tgtaccccac 420
cccttcccac ttaataaaac gtgctccctg ttgggtgtca tctgtgaaga ctgccaggcc 480
taggctctct gtagagagtc ttcaagatcc cggagtggta gcgctgtctc ctggtgaagg 540
agtatttgtc acactggaat gtgactgtgt gtgtatgtat gtgtatatat atatatatat 600
atatatataa acaagtttgt tgacacctac aaaaaaaaaa                                     640

```

<210> 432
 <211> 2068
 <212> DNA
 <213> Homo sapiens

```

<400> 432
cctcagaagt ccgtgccagt gaccggaggc ggccggcgcg agcggttcct tgtgggctag 60
aagaatcctg caaaaatgtc tctctatcca tctctcgaag acttgaaggt agacaaagta 120
attcaggctc aaactgcttt ttctgcaaac cctgccaatc cagcaatttt gtcagaagct 180
tctgtctcta tccctcacga tggaaatctc tatcccagac tgatccaga gctctctcaa 240
tacatggggc tgagtttaaa tgaagaagaa atacgtgcaa atgtggcgtt ggtttctggt 300
gcaccacttc aggggcagtt ggtagcaaga ccttccagta taaactatat ggtggctcct 360
gtaactggta atgatgttg aattcgtaga gcagaaatta agcaagggat tctggaagtc 420
attttgtgta aggatcaaga tggaaaaatt ggactcaggc ttaaatcaat agataatggt 480
atatttgttc agctagtcca ggctaattct ccagcctcat tggttggtct gagatttggg 540
gaccaagtac ttcagatcaa tggtgaaaac tgtgcaggat ggagctctga taaagcgcac 600
aagggtgctc aacaggcttt tggagagaag attaccatga ccattcgtga caggcccttt 660
gaacggacga ttaccatgca taaggatagc actggacatg ttggttttat ctttaaaaaa 720
ggaaaaataa catccatagt gaaagatagc tctgcagcca gaaatggtct tctcacggaa 780
cataacatct gtgaaatcaa tggacagaat gtcattggat tgaaggactc tcaaattgca 840
gacatactgt caacatctgg gactgtagtt actattacaa tcatgcctgc ttttatcttt 900
gaacatatta ttaagcggat ggcaccaagc attatgaaaa gcctaattgga ccacaccatt 960
cctgagggtt aaaattcacg gcaccatgga aatgtagctg aacgtctcca gtttctctct 1020
ttggcaactt ctgtattatg cacgtgaagc cttcccggag ccagcgagca tatgctgcat 1080
gaggaccttt ctatcttaca ttatggctgg gaactctact ctttcatctg ataccttgtt 1140
cagatttcaa aatagttgta gcctatcctt ggttttacag atgtgaaact ttcaagagat 1200
ttactgactt tcctagaata gtttctctac tggaaacctg atgcttttat aagccattgt 1260
gattagtagt actgttacag gcttagcttt gtgtgaaaac cagtcacctt tctcctaggt 1320
aatgagtatg gctgttcata ttactttagt tctatagcat actgcatctt taacatgcta 1380
tcatagtaca tttagaatga ttgcctttga tttttttttt aaattctgtg tgtgtgtgtg 1440
taaaatgcc aattaagaaca ctggtttcat tccatgtaag cattaaacag tgtatgtagg 1500

```

```

tttcaagaga ttgtgatgat tcttaaattt taactacctt cacttaatat gcttgaactg 1560
tcgccttaac tatgttaagc atctagacta aaagccaaaa tataattatt gctgcctttc 1620
taaaaaccca aaatgtagtt ctctattaac ctgaaatgta cactagccca gaacagttta 1680
atggtactta ctgagctata gcatagctgc ttagttgttt ttgagagttt ttagtcaaca 1740
cataatggaa acttctttct tctaaaagtt gccagtgcc cttttaagaa gtgaatcact 1800
atatgtgatg taaaagttat tacactaaac aggataaact tttgactccc cttttgttca 1860
tttgtggatt aagtgggata ataacttaatt ttggcatttg actcttaaga ttatgtaacc 1920
tagctacttt gggatgggtct tagaatattt ttctgataac ttgttccttt tcctgactcc 1980
tccttgcaaa caaaatgata gttgacactt tatectgatt tttttcttct ttttggttta 2040
tgtctattct aattaaatat gtataaat                                2068

```

<210> 433

<211> 1723

<212> DNA

<213> Homo sapiens

<400> 433

```

tttctttgtt aagtcgttcc ctctacaaag gacttcctag tgggtgtgaa aggcagcggg 60
ggccacagag gcggcggaga gatggccttc agcggttccc aggctcccta cctgagtcca 120
gctgtccctt tttctgggac tattcaagga ggtctccagg acggacttca gatcactgtc 180
aatgggaccg ttctcagctc cagtggaaac aggtttgctg tgaactttca gactggcttc 240
agtggaaatg acattgcctt ccacttcaac cctcggtttg aagatggagg gtacgtgggtg 300
tgcaacacga ggcagaacgg aagctggggg cccgaggaga ggaagacaca catgcctttc 360
cagaaggggg tgccctttga cctctgcttc ctggtgcaga gctcagattt caaggtgatg 420
gtgaacggga tcctcttctg gcagtaactc caccgcgtgc cttccaccg tgtggacacc 480
atctccgtca atggctctgt gcagctgtcc tacatcagct tccagaacct ccgcacagtc 540
cctgttcagc ctgcctttcc acggtgccgt tctcccagcc tgtctgtttc ccaccaggc 600
ccagggggcg cagacaaaaa cctcccggcg tgtggcctgc caaccgggt cccattacct 660
agacagtcac ccacacagtg cagagcgccc ctggacagat gttctctact ccgcctatcc 720
cacctatgat gtacccccac cccgcctatc cgatgccttt catcaccacc attctgggag 780
ggctgtacct atccaagtcc atcctcctgt caggcaactgt cctgcccagt gctcagaggt 840
tccacatcaa cctgtgctct gggaaccaca tcgccttcca cctgaacccc cgttttgatg 900
agaatgctgt ggtccgcaac acccagatcg acaactcctg ggggtctgag gagcgaagtc 960
tgccccgaaa aatgcccttc gtccgtggcc agagcttctc agtgtggatc ttgtgtgaag 1020
ctcactgcct caaggtggcc gtggatggtc agcacctgtt tgaatactac catcgctga 1080
ggaacctgcc caccatcaac agactggaag tggggggcga catccagctg acccatgtgc 1140
agacataggc ggcttcctgg ccctggggcc gggggctggg gtgtggggca gtctgggtcc 1200
tctcatcatc ccacttccc agggccagcc tttccaacct tgccctggat ctgggcttta 1260
atgcagaggc catgtccttg tctggtcctg cttctggcta cagccaccct ggaacggaga 1320
aggcagctga cggggattgc cttcctcagc cgcagcagca cctggggctc cagctgctgg 1380
aatcctacca tcccaggagg caggcacagc caggagagg ggaggagtgg gcagtgaaga 1440
tgaagcccca tgctcagtc cctcccatcc ccacgcagc tccaccccag tccaagcca 1500
ccagctgtct gctcctgggt ggaggtggcc tcctcagccc ctctctctctg acctttaacc 1560
tcactctcac cttgcaccgt gcaccaacct ttcacccctc ctggaaagca ggctgatgg 1620
cttcccactg gcctccacca cctgaccaga gtgttctctt cagaggactg gctcctttcc 1680
cagtgtcctt aaaataaaga aatgaaaatg cttgttggca cat                                1723

```

<210> 434

<211> 1702

<212> PRT

<213> Homo sapiens

<400> 434

Ala Ala Val Leu Gln Ser Cys Thr Ala Phe Ile Glu Arg Tyr Gly Ile

					5						10						15
Val	Asp	Gly	Ile	Tyr	Arg	Leu	Ser	Gly	Val	Ala	Ser	Asn	Ile	Gln	Arg		
			20					25					30				
Leu	Arg	His	Glu	Phe	Asp	Ser	Glu	His	Val	Pro	Asp	Leu	Thr	Lys	Glu		
		35					40					45					
Pro	Tyr	Val	Gln	Asp	Ile	His	Ser	Val	Gly	Ser	Leu	Cys	Lys	Leu	Tyr		
	50					55					60						
Phe	Arg	Glu	Leu	Pro	Asn	Pro	Leu	Leu	Thr	Tyr	Gln	Leu	Tyr	Glu	Lys		
	65				70					75					80		
Phe	Ser	Asp	Ala	Val	Ser	Ala	Ala	Thr	Asp	Glu	Glu	Arg	Leu	Ile	Lys		
				85					90					95			
Ile	His	Asp	Val	Ile	Gln	Gln	Leu	Pro	Pro	Pro	His	Tyr	Arg	Thr	Leu		
			100					105					110				
Glu	Phe	Leu	Met	Arg	His	Leu	Ser	Leu	Leu	Ala	Asp	Tyr	Cys	Ser	Ile		
		115					120					125					
Thr	Asn	Met	His	Ala	Lys	Asn	Leu	Ala	Ile	Val	Trp	Ala	Pro	Asn	Leu		
	130					135					140						
Leu	Arg	Ser	Lys	Gln	Ile	Glu	Ser	Ala	Cys	Phe	Ser	Gly	Thr	Ala	Ala		
	145				150					155					160		
Phe	Met	Glu	Val	Arg	Ile	Gln	Ser	Val	Val	Val	Glu	Phe	Ile	Leu	Asn		
			165					170						175			
His	Val	Asp	Val	Leu	Phe	Ser	Gly	Arg	Ile	Ser	Met	Ala	Met	Gln	Glu		
		180						185					190				
Gly	Ala	Ala	Ser	Leu	Ser	Arg	Pro	Lys	Ser	Leu	Leu	Val	Ser	Ser	Pro		
	195						200					205					
Ser	Thr	Lys	Leu	Leu	Thr	Leu	Glu	Glu	Ala	Gln	Ala	Arg	Thr	Gln	Ala		
	210					215					220						
Gln	Val	Asn	Ser	Pro	Ile	Val	Thr	Glu	Asn	Lys	Tyr	Ile	Glu	Val	Gly		
	225				230					235					240		
Glu	Gly	Pro	Ala	Ala	Leu	Gln	Gly	Lys	Phe	His	Thr	Ile	Ile	Glu	Phe		
				245					250					255			
Pro	Leu	Glu	Arg	Lys	Arg	Pro	Gln	Asn	Lys	Met	Lys	Lys	Ser	Pro	Val		
			260					265					270				
Gly	Ser	Trp	Arg	Ser	Phe	Phe	Asn	Leu	Gly	Lys	Ser	Ser	Ser	Val	Ser		
		275					280					285					
Lys	Arg	Lys	Leu	Gln	Arg	Asn	Glu	Ser	Glu	Pro	Ser	Glu	Met	Lys	Ala		

290	295	300
Met Ala Leu Lys Gly Gly Arg Ala Glu Gly Thr Leu Arg Ser Ala Lys 305 310 315 320		
Ser Glu Glu Ser Leu Thr Ser Leu His Ala Val Asp Gly Asp Ser Lys 325 330 335		
Leu Phe Arg Pro Arg Arg Pro Arg Ser Ser Ser Asp Ala Leu Ser Ala 340 345 350		
Ser Phe Asn Gly Glu Met Leu Gly Asn Arg Cys Asn Ser Tyr Asp Asn 355 360 365		
Leu Pro His Asp Asn Glu Ser Glu Glu Glu Gly Gly Leu Leu His Ile 370 375 380		
Pro Ala Leu Met Ser Pro His Ser Ala Glu Asp Val Asp Leu Ser Pro 385 390 395 400		
Pro Asp Ile Gly Val Ala Ser Leu Asp Phe Asp Pro Met Ser Phe Gln 405 410 415		
Cys Ser Pro Pro Lys Ala Glu Ser Glu Cys Leu Glu Ser Gly Ala Ser 420 425 430		
Phe Leu Asp Ser Pro Gly Tyr Ser Lys Asp Lys Pro Ser Ala Asn Lys 435 440 445		
Lys Asp Ala Glu Thr Gly Ser Ser Gln Cys Gln Thr Pro Gly Ser Thr 450 455 460		
Ala Ser Ser Glu Pro Val Ser Pro Leu Gln Glu Lys Leu Ser Pro Phe 465 470 475 480		
Phe Thr Leu Asp Leu Ser Pro Thr Glu Asp Lys Ser Ser Lys Pro Ser 485 490 495		
Ser Phe Thr Glu Lys Val Val Tyr Ala Phe Ser Pro Lys Ile Gly Arg 500 505 510		
Lys Leu Ser Lys Ser Pro Ser Met Ser Ile Ser Glu Pro Ile Ser Val 515 520 525		
Thr Leu Pro Pro Arg Val Ser Glu Val Ile Gly Thr Val Ser Asn Thr 530 535 540		
Thr Ala Gln Asn Ala Ser Ser Ser Thr Trp Asp Lys Cys Val Glu Glu 545 550 555 560		
Arg Asp Ala Thr Asn Arg Ser Pro Thr Gln Ile Val Lys Met Lys Thr 565 570 575		
Asn Glu Thr Val Ala Gln Glu Ala Tyr Glu Ser Glu Val Gln Pro Leu		

580					585					590					
Asp	Gln	Val	Ala	Ala	Glu	Glu	Val	Glu	Leu	Pro	Gly	Lys	Glu	Asp	Gln
		595					600					605			
Ser	Val	Ser	Ser	Ser	Gln	Ser	Lys	Ala	Val	Ala	Ser	Gly	Gln	Thr	Gln
	610					615					620				
Thr	Gly	Ala	Val	Thr	His	Asp	Pro	Pro	Gln	Asp	Ser	Val	Pro	Val	Ser
625					630					635					640
Ser	Val	Ser	Leu	Ile	Pro	Pro	Pro	Pro	Pro	Pro	Lys	Asn	Val	Ala	Arg
				645					650					655	
Met	Leu	Ala	Leu	Ala	Leu	Ala	Glu	Ser	Ala	Gln	Gln	Ala	Ser	Thr	Gln
			660					665					670		
Ser	Leu	Lys	Arg	Pro	Gly	Thr	Ser	Gln	Ala	Gly	Tyr	Thr	Asn	Tyr	Gly
		675					680						685		
Asp	Ile	Ala	Val	Ala	Thr	Thr	Glu	Asp	Asn	Leu	Ser	Ser	Ser	Tyr	Ser
	690					695					700				
Ala	Val	Ala	Leu	Asp	Lys	Ala	Tyr	Phe	Gln	Thr	Asp	Arg	Pro	Ala	Glu
705					710					715					720
Gln	Phe	His	Leu	Gln	Asn	Asn	Ala	Pro	Gly	Asn	Cys	Asp	His	Pro	Leu
				725					730					735	
Pro	Glu	Thr	Thr	Ala	Thr	Gly	Asp	Pro	Thr	His	Ser	Asn	Thr	Thr	Glu
			740					745					750		
Ser	Gly	Glu	Gln	His	His	Gln	Val	Asp	Leu	Thr	Gly	Asn	Gln	Pro	His
		755					760					765			
Gln	Ala	Tyr	Leu	Ser	Gly	Asp	Pro	Glu	Lys	Ala	Arg	Ile	Thr	Ser	Val
	770					775					780				
Pro	Leu	Asp	Ser	Glu	Lys	Ser	Asp	Asp	His	Val	Ser	Phe	Pro	Glu	Asp
785					790					795				800	
Gln	Ser	Gly	Lys	Asn	Ser	Met	Pro	Thr	Val	Ser	Phe	Leu	Asp	Gln	Asp
				805					810					815	
Gln	Ser	Pro	Pro	Arg	Phe	Tyr	Ser	Gly	Asp	Gln	Pro	Pro	Ser	Tyr	Leu
			820					825					830		
Gly	Ala	Ser	Val	Asp	Lys	Leu	His	His	Pro	Leu	Glu	Phe	Ala	Asp	Lys
		835					840					845			
Ser	Pro	Thr	Pro	Pro	Asn	Leu	Pro	Ser	Asp	Lys	Ile	Tyr	Pro	Pro	Ser
	850					855					860				
Gly	Ser	Pro	Glu	Glu	Asn	Thr	Ser	Thr	Ala	Thr	Met	Thr	Tyr	Met	Thr

865	870	875	880
Thr Thr Pro Ala	Thr Ala Gln Met Ser	Thr Lys Glu Ala Ser	Trp Asp
	885	890	895
Val Ala Glu Gln	Pro Thr Thr Ala Asp	Phe Ala Ala Ala	Thr Leu Gln
	900	905	910
Arg Thr His Arg	Thr Asn Arg Pro	Leu Pro Pro Pro	Pro Ser Gln Arg
	915	920	925
Ser Ala Glu Gln	Pro Pro Val Val	Gly Gln Val Gln	Ala Ala Thr Asn
	930	935	940
Ile Gly Leu Asn	Asn Ser His Lys	Val Gln Gly Val	Val Pro Val Pro
	945	950	955
Glu Arg Pro Pro	Glu Pro Arg Ala	Met Asp Asp Pro	Ala Ser Ala Phe
	965	970	975
Ile Ser Asp Ser	Gly Ala Ala Ala	Ala Gln Cys Pro	Met Ala Thr Ala
	980	985	990
Val Gln Pro Gly	Leu Pro Glu Lys	Val Arg Asp Gly	Ala Arg Val Pro
	995	1000	1005
Leu Leu His Leu	Arg Ala Glu Ser	Val Pro Ala His	Pro Cys Gly Phe
	1010	1015	1020
Pro Ala Pro Leu	Pro Pro Thr Arg	Met Met Glu Ser	Lys Met Ile Ala
	1025	1030	1035
Ala Ile His Ser	Ser Ser Ala Asp	Ala Thr Ser Ser	Ser Asn Tyr His
	1045	1050	1055
Ser Phe Val Thr	Ala Ser Ser Thr	Ser Val Asp Asp	Ala Leu Pro Leu
	1060	1065	1070
Pro Leu Pro Val	Pro Gln Pro Lys	His Ala Ser Gln	Lys Thr Val Tyr
	1075	1080	1085
Ser Ser Phe Ala	Arg Pro Asp Val	Thr Thr Glu Pro	Phe Gly Pro Asp
	1090	1095	1100
Asn Cys Leu His	Phe Asn Met Thr	Pro Asn Cys Gln	Tyr Arg Pro Gln
	1105	1110	1115
Ser Val Pro Pro	His His Asn Lys	Leu Glu Gln His	Gln Val Tyr Gly
	1125	1130	1135
Ala Arg Ser Glu	Pro Pro Ala Ser	Met Gly Leu Arg	Tyr Asn Thr Tyr
	1140	1145	1150
Val Ala Pro Gly	Arg Asn Ala Ser	Gly His His Ser	Lys Pro Cys Ser

1155	1160	1165
Arg Val Glu Tyr Val Ser Ser Leu Ser Ser Ser Val Arg Asn Thr Cys 1170	1175	1180
Tyr Pro Glu Asp Ile Pro Pro Tyr Pro Thr Ile Arg Arg Val Gln Ser 1185	1190	1195 1200
Leu His Ala Pro Pro Ser Ser Met Ile Arg Ser Val Pro Ile Ser Arg 1205	1210	1215
Thr Glu Val Pro Pro Asp Asp Glu Pro Ala Tyr Cys Pro Arg Pro Leu 1220	1225	1230
Tyr Gln Tyr Lys Pro Tyr Gln Ser Ser Gln Ala Arg Ser Asp Tyr His 1235	1240	1245
Val Thr Gln Leu Gln Pro Tyr Phe Glu Asn Gly Arg Val His Tyr Arg 1250	1255	1260
Tyr Ser Pro Tyr Ser Ser Ser Ser Ser Ser Tyr Tyr Ser Pro Asp Gly 1265	1270	1275 1280
Ala Leu Cys Asp Val Asp Ala Tyr Gly Thr Val Gln Leu Arg Pro Leu 1285	1290	1295
His Arg Leu Pro Asn Arg Asp Phe Ala Phe Tyr Asn Pro Arg Leu Gln 1300	1305	1310
Gly Lys Ser Leu Tyr Ser Tyr Ala Gly Leu Ala Pro Arg Pro Arg Ala 1315	1320	1325
Asn Val Thr Gly Tyr Phe Ser Pro Asn Asp His Asn Val Val Ser Met 1330	1335	1340
Pro Pro Ala Ala Asp Val Lys His Thr Tyr Thr Ser Trp Asp Leu Glu 1345	1350	1355 1360
Asp Met Glu Lys Tyr Arg Met Gln Ser Ile Arg Arg Glu Ser Arg Ala 1365	1370	1375
Arg Gln Lys Val Lys Gly Pro Val Met Ser Gln Tyr Asp Asn Met Thr 1380	1385	1390
Pro Ala Val Gln Asp Asp Leu Gly Gly Ile Tyr Val Ile His Leu Arg 1395	1400	1405
Ser Lys Ser Asp Pro Gly Lys Thr Gly Leu Leu Ser Val Ala Glu Gly 1410	1415	1420
Lys Glu Ser Arg His Ala Ala Lys Ala Ile Ser Pro Glu Gly Glu Asp 1425	1430	1435 1440
Arg Phe Tyr Arg Arg His Pro Glu Ala Glu Met Asp Arg Ala His His		

1445	1450	1455
His Gly Gly His Gly Ser Thr Gln Pro Glu Lys Pro Ser Leu Pro Gln 1460 1465 1470		
Lys Gln Ser Ser Leu Arg Ser Arg Lys Leu Pro Asp Met Gly Cys Ser 1475 1480 1485		
Leu Pro Glu His Arg Ala His Gln Glu Ala Ser His Arg Gln Phe Cys 1490 1495 1500		
Glu Ser Lys Asn Gly Pro Pro Tyr Pro Gln Gly Ala Gly Gln Leu Asp 1505 1510 1515 1520		
Tyr Gly Ser Lys Gly Ile Pro Asp Thr Ser Glu Pro Val Ser Tyr His 1525 1530 1535		
Asn Ser Gly Val Lys Tyr Ala Ala Ser Gly Gln Glu Ser Leu Arg Leu 1540 1545 1550		
Asn His Lys Glu Val Arg Leu Ser Lys Glu Met Glu Arg Pro Trp Val 1555 1560 1565		
Arg Gln Pro Ser Ala Pro Glu Lys His Ser Arg Asp Cys Tyr Lys Glu 1570 1575 1580		
Glu Glu His Leu Thr Gln Ser Ile Val Pro Pro Pro Lys Pro Glu Arg 1585 1590 1595 1600		
Ser His Ser Leu Lys Leu His His Thr Gln Asn Val Glu Arg Asp Pro 1605 1610 1615		
Ser Val Leu Tyr Gln Tyr Gln Pro His Gly Lys Arg Gln Ser Ser Val 1620 1625 1630		
Thr Val Val Ser Gln Tyr Asp Asn Leu Glu Asp Tyr His Ser Leu Pro 1635 1640 1645		
Gln His Gln Arg Gly Val Phe Gly Gly Gly Gly Met Gly Thr Tyr Val 1650 1655 1660		
Pro Pro Gly Phe Pro His Pro Gln Ser Arg Thr Tyr Ala Thr Ala Leu 1665 1670 1675 1680		
Gly Gln Gly Ala Phe Leu Pro Ala Glu Leu Ser Leu Gln His Pro Glu 1685 1690 1695		
Thr Gln Ile His Ala Glu 1700		

<210> 435

<211> 160

<212> PRT

<213> Homo sapiens

<400> 435

Pro Phe Gln Gln Val Gly Arg Cys Asn Pro Ser Pro Gln Thr Arg Pro
 5 10 15

Gly Pro Ala Ser Lys Val Lys Gln Asp Met Pro Pro Pro Gly Gly Tyr
 20 25 30

Gly Pro Ile Asp Tyr Lys Arg Asn Leu Pro Arg Arg Gly Leu Ser Gly
 35 40 45

Tyr Ser Met Leu Ala Ile Gly Ile Gly Thr Leu Ile Tyr Gly His Trp
 50 55 60

Ser Ile Met Lys Trp Asn Arg Glu Arg Arg Arg Leu Gln Ile Glu Asp
 65 70 75 80

Phe Glu Ala Arg Ile Ala Leu Leu Pro Leu Leu Gln Ala Glu Thr Asp
 85 90 95

Arg Arg Thr Leu Gln Met Leu Arg Glu Asn Leu Glu Glu Glu Ala Ile
 100 105 110

Ile Met Lys Asp Val Pro Asp Trp Lys Val Gly Glu Ser Val Phe His
 115 120 125

Thr Thr Arg Trp Val Pro Pro Leu Ile Gly Glu Leu Tyr Gly Leu Arg
 130 135 140

Thr Thr Glu Glu Ala Leu His Ala Ser His Gly Phe Met Trp Tyr Thr
 145 150 155 160

<210> 436

<211> 396

<212> PRT

<213> Homo sapiens

<400> 436

Arg Ala Gln Glu Ala Ala Ala Ala Ala Asp Gly Pro Pro Ala Ala
 5 10 15

Asp Gly Glu Asp Gly Gln Asp Pro His Ser Lys His Leu Tyr Thr Ala
 20 25 30

Asp Met Phe Thr His Gly Ile Gln Ser Ala Ala His Phe Val Met Phe
 35 40 45

Phe Ala Pro Trp Cys Gly His Cys Gln Arg Leu Gln Pro Thr Trp Asn
 50 55 60

Asp Leu Gly Asp Lys Tyr Asn Ser Met Glu Asp Ala Lys Val Tyr Val
 65 70 75 80

Ala	Lys	Val	Asp	Cys	Thr	Ala	His	Ser	Asp	Val	Cys	Ser	Ala	Gln	Gly	85	90	95	
Val	Arg	Gly	Tyr	Pro	Thr	Leu	Lys	Leu	Phe	Lys	Pro	Gly	Gln	Glu	Ala	100	105	110	
Val	Lys	Tyr	Gln	Gly	Pro	Arg	Asp	Phe	Gln	Thr	Leu	Glu	Asn	Trp	Met	115	120	125	
Leu	Gln	Thr	Leu	Asn	Glu	Glu	Pro	Val	Thr	Pro	Glu	Pro	Glu	Val	Glu	130	135	140	
Pro	Pro	Ser	Ala	Pro	Glu	Leu	Lys	Gln	Gly	Leu	Tyr	Glu	Leu	Ser	Ala	145	150	155	160
Ser	Asn	Phe	Glu	Leu	His	Val	Ala	Gln	Gly	Asp	His	Phe	Ile	Lys	Phe	165	170	175	
Phe	Ala	Pro	Trp	Cys	Gly	His	Cys	Lys	Ala	Leu	Ala	Pro	Thr	Trp	Glu	180	185	190	
Gln	Leu	Ala	Leu	Gly	Leu	Glu	His	Ser	Glu	Thr	Val	Lys	Ile	Gly	Lys	195	200	205	
Val	Asp	Cys	Thr	Gln	His	Tyr	Glu	Leu	Cys	Ser	Gly	Asn	Gln	Val	Arg	210	215	220	
Gly	Tyr	Pro	Thr	Leu	Leu	Trp	Phe	Arg	Asp	Gly	Lys	Lys	Val	Asp	Gln	225	230	235	240
Tyr	Lys	Gly	Lys	Arg	Asp	Leu	Glu	Ser	Leu	Arg	Glu	Tyr	Val	Glu	Ser	245	250	255	
Gln	Leu	Gln	Arg	Thr	Glu	Thr	Gly	Ala	Thr	Glu	Thr	Val	Thr	Pro	Ser	260	265	270	
Glu	Ala	Pro	Val	Leu	Ala	Ala	Glu	Pro	Glu	Ala	Asp	Lys	Gly	Thr	Val	275	280	285	
Leu	Ala	Leu	Thr	Glu	Asn	Thr	Phe	Asp	Asp	Thr	Ile	Ala	Glu	Gly	Ile	290	295	300	
Thr	Phe	Ile	Lys	Phe	Tyr	Ala	Pro	Trp	Cys	Gly	His	Cys	Lys	Thr	Leu	305	310	315	320
Ala	Pro	Thr	Trp	Glu	Glu	Leu	Ser	Lys	Lys	Glu	Phe	Pro	Gly	Leu	Ala	325	330	335	
Gly	Val	Lys	Ile	Ala	Glu	Val	Asp	Cys	Thr	Ala	Glu	Arg	Asn	Ile	Cys	340	345	350	
Ser	Lys	Tyr	Ser	Val	Arg	Gly	Tyr	Pro	Thr	Leu	Leu	Leu	Phe	Arg	Gly	355	360	365	

Gly Lys Lys Val Ser Glu His Ser Gly Gly Arg Asp Leu Asp Ser Leu
 370 375 380

His Arg Phe Val Leu Ser Gln Ala Lys Asp Glu Leu
 385 390 395

<210> 437
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 437
 Ala Glu Met Asp Pro Leu Arg Ala Gln Gln Leu Ala Ala Glu Leu Glu
 5 10 15

Val Glu Met Met Ala Asp Met Tyr Asn Arg Met Thr Ser Ala Cys His
 20 25 30

Arg Lys Cys Val Pro Pro His Tyr Lys Glu Ala Glu Leu Ser Lys Gly
 35 40 45

Glu Ser Val Cys Leu Asp Arg Cys Val Ser Lys Tyr Leu Asp Ile His
 50 55 60

Glu Arg Met Gly Lys Lys Leu Thr Glu Leu Ser Met Gln Asp Glu Glu
 65 70 75 80

Leu Met Lys Arg Val Gln Gln Ser Ser Gly Pro Ala
 85 90

<210> 438
 <211> 303
 <212> PRT
 <213> Homo sapiens

<400> 438
 Lys Asn Pro Ala Lys Met Ser Leu Tyr Pro Ser Leu Glu Asp Leu Lys
 5 10 15

Val Asp Lys Val Ile Gln Ala Gln Thr Ala Phe Ser Ala Asn Pro Ala
 20 25 30

Asn Pro Ala Ile Leu Ser Glu Ala Ser Ala Pro Ile Pro His Asp Gly
 35 40 45

Asn Leu Tyr Pro Arg Leu Tyr Pro Glu Leu Ser Gln Tyr Met Gly Leu
 50 55 60

Ser Leu Asn Glu Glu Glu Ile Arg Ala Asn Val Ala Val Val Ser Gly
 65 70 75 80

Ala Pro Leu Gln Gly Gln Leu Val Ala Arg Pro Ser Ser Ile Asn Tyr
85 90 95

Met Val Ala Pro Val Thr Gly Asn Asp Val Gly Ile Arg Arg Ala Glu
100 105 110

Ile Lys Gln Gly Ile Arg Glu Val Ile Leu Cys Lys Asp Gln Asp Gly
115 120 125

Lys Ile Gly Leu Arg Leu Lys Ser Ile Asp Asn Gly Ile Phe Val Gln
130 135 140

Leu Val Gln Ala Asn Ser Pro Ala Ser Leu Val Gly Leu Arg Phe Gly
145 150 155 160

Asp Gln Val Leu Gln Ile Asn Gly Glu Asn Cys Ala Gly Trp Ser Ser
165 170 175

Asp Lys Ala His Lys Val Leu Lys Gln Ala Phe Gly Glu Lys Ile Thr
180 185 190

Met Thr Ile Arg Asp Arg Pro Phe Glu Arg Thr Ile Thr Met His Lys
195 200 205

Asp Ser Thr Gly His Val Gly Phe Ile Phe Lys Asn Gly Lys Ile Thr
210 215 220

Ser Ile Val Lys Asp Ser Ser Ala Ala Arg Asn Gly Leu Leu Thr Glu
225 230 235 240

His Asn Ile Cys Glu Ile Asn Gly Gln Asn Val Ile Gly Leu Lys Asp
245 250 255

Ser Gln Ile Ala Asp Ile Leu Ser Thr Ser Gly Thr Val Val Thr Ile
260 265 270

Thr Ile Met Pro Ala Phe Ile Phe Glu His Ile Ile Lys Arg Met Ala
275 280 285

Pro Ser Ile Met Lys Ser Leu Met Asp His Thr Ile Pro Glu Val
290 295 300

<210> 439

<211> 378

<212> PRT

<213> Homo sapiens

<400> 439

Val Val Pro Ser Thr Lys Asp Phe Leu Val Gly Val Lys Gly Ser Gly
5 10 15

Gly His Arg Gly Gly Gly Glu Met Ala Phe Ser Gly Ser Gln Ala Pro
20 25 30

Tyr Leu Ser Pro Ala Val Pro Phe Ser Gly Thr Ile Gln Gly Gly Leu
 35 40 45
 Gln Asp Gly Leu Gln Ile Thr Val Asn Gly Thr Val Leu Ser Ser Ser
 50 55 60
 Gly Thr Arg Phe Ala Val Asn Phe Gln Thr Gly Phe Ser Gly Asn Asp
 65 70 75 80
 Ile Ala Phe His Phe Asn Pro Arg Phe Glu Asp Gly Gly Tyr Val Val
 85 90 95
 Cys Asn Thr Arg Gln Asn Gly Ser Trp Gly Pro Glu Glu Arg Lys Thr
 100 105 110
 His Met Pro Phe Gln Lys Gly Met Pro Phe Asp Leu Cys Phe Leu Val
 115 120 125
 Gln Ser Ser Asp Phe Lys Val Met Val Asn Gly Ile Leu Phe Val Gln
 130 135 140
 Tyr Phe His Arg Val Pro Phe His Arg Val Asp Thr Ile Ser Val Asn
 145 150 155 160
 Gly Ser Val Gln Leu Ser Tyr Ile Ser Phe Gln Asn Pro Arg Thr Val
 165 170 175
 Pro Val Gln Pro Ala Phe Ser Thr Val Pro Phe Ser Gln Pro Val Cys
 180 185 190
 Phe Pro Pro Arg Pro Arg Gly Arg Arg Gln Lys Pro Pro Gly Val Trp
 195 200 205
 Pro Ala Asn Pro Ala Pro Ile Thr Gln Thr Val Ile His Thr Val Gln
 210 215 220
 Ser Ala Pro Gly Gln Met Phe Ser Thr Pro Ala Ile Pro Pro Met Met
 225 230 235 240
 Tyr Pro His Pro Ala Tyr Pro Met Pro Phe Ile Thr Thr Ile Leu Gly
 245 250 255
 Gly Leu Tyr Pro Ser Lys Ser Ile Leu Leu Ser Gly Thr Val Leu Pro
 260 265 270
 Ser Ala Gln Arg Phe His Ile Asn Leu Cys Ser Gly Asn His Ile Ala
 275 280 285
 Phe His Leu Asn Pro Arg Phe Asp Glu Asn Ala Val Val Arg Asn Thr
 290 295 300
 Gln Ile Asp Asn Ser Trp Gly Ser Glu Glu Arg Ser Leu Pro Arg Lys
 305 310 315 320

Met Pro Phe Val Arg Gly Gln Ser Phe Ser Val Trp Ile Leu Cys Glu
 325 330 335

Ala His Cys Leu Lys Val Ala Val Asp Gly Gln His Leu Phe Glu Tyr
 340 345 350

Tyr His Arg Leu Arg Asn Leu Pro Thr Ile Asn Arg Leu Glu Val Gly
 355 360 365

Gly Asp Ile Gln Leu Thr His Val Gln Thr
 370 375

<210> 440
 <211> 2239
 <212> DNA
 <213> Homo sapiens

<400> 440

ggaggttgaa gtgagcagag atcatgccag cctgggtgac agtgagactc tgtctcaaac 60
 agaattaagg aaaaaagaaa gaaagaaaaa gagagagagg aaattccagg ccaattgtgg 120
 catagatttt atcatattct ggattttttg gattcttttg ttttctcatt actggattca 180
 ggaaagcctg ttgtgtccac catctccaaa ggaggttacc tgcagggaaa tgttaacggg 240
 aggctgcctt ccctgggcaa caaggagcca cctgggcagg acgccttttc aggaagagac 300
 gccttttcag gaagagacgc cttttcagga agagagaaaag tgcagctgaa gaggaaagtc 360
 actttactga ggggagcttc cattatcatt ggcaccatca ttggagcagg aatcttcatt 420
 tctcctaagg gcgtgctcca gaacacgggc agcgtgggca tgtctctgac catctggacg 480
 gtgtgtgggg tcctgtcact atttggagct ttgtcttatg ctgaattggg aacaactata 540
 aagaaatctg gaggtcatta cacatatatt ttggaagtct ttgggtccatt accagctttt 600
 gtacgagtct ggggtggaact cctcataata cgcoctgcag ctactgctgt gatatccctg 660
 gcatttggac gctacattct ggaaccattt ttatttcaat gtgaaatccc tgaacttgcg 720
 atcaagctca ttacagctgt gggcataact gtagtgatgg tcctaaatag catgagtgtc 780
 agctggagcg cccggatcca gattttctta accttttgca agctcacagc aattctgata 840
 attatagctc ctggagttat gcagctaatt aaaggtcaaa cgcagaactt taaagacgcc 900
 ttttcaggaa gagattcaag tattacgcgg ttgccactgg ctttttatta tggaatgtat 960
 gcatatgctg gctggtttta cctcaacttt gttactgaag aagtagaaaa ccctgaaaaa 1020
 accattcccc ttgcaatatg tatatccatg gccattgtca ccattggcta tgtgtctgaca 1080
 aatgtggcct actttacgac cattaatgct gaggagctgc tgctttcaaa tgcagtggca 1140
 gtgacctttt ctgagcggct actgggaaat ttctcattag cagttccgat ctttgttgcc 1200
 ctctcctgct ttggctccat gaacgggtgt gtgtttgctg tctccagggt attctatgtt 1260
 gcgtctcgag agggtcacct tccagaaatc ctctccatga ttcatgtccg caagcacact 1320
 cctctaccag ctgttattgt tttgcacct ttgacaatga taatgctctt ctctggagac 1380
 ctcgacagtc ttttgaattt cctcagtttt gccaggtggc tttttatttg gctggcagtt 1440
 gctgggctga tttatcttcg atacaaatgc ccagatatgc atcgctcttt caaggtgcc 1500
 ctgttcatcc cagctttgtt ttcttcaca tgctcttca tgggtgacct ttccctctat 1560
 tcggacccat ttagtacagg gattggcttc gtcatcactc tgactggagt cctgcgtagt 1620
 tatctcttta ttatatggga caagaaaccc aggtgtgtta gaataatgtc agagaaaata 1680
 accagaacat tacaataat actggaagtt gtaccagaag aagataagtt atgaactaat 1740
 ggacttgaga tcttggcaat ctgccaagg ggagacacaa aatagggttt tttacttcat 1800
 tttctgaaag tctagagaat tacaactttg gtgataaaca aaaggagtca gttattttta 1860
 ttcatatatt ttagcatatt cgaactaatt tctaagaaat ttagttataa ctctatgtag 1920
 ttatagaaag tgaatatgca gttattctat gagtcgcaca attcttgagt ctctgatacc 1980

tacctattgg ggtaggaga aaagactaga caattactat gtgggtcattc tctacaacat 2040
 atggttagcac ggcaaagaac cttcaaattg aagactgaga tttttctgta tatatgggtt 2100
 ttgtaaagat gggttttacac actacagatg tctatactgt gaaaagtgtt ttcaattctg 2160
 aaaaaaagca tacatcatga ttatggcaaa gaggagagaa ggtagagctg ttcttaaatt 2220
 tattaataaaa aaaaaaaaaa 2239

<210> 441

<211> 5981

<212> DNA

<213> Homo sapiens

<400> 441

aggttgaagt gagcagagat catgccagcc tgggtgacag tgagactctg tctcaaacag 60
 aattaaggaa aaaagaaaga aagaaaaaga gagagaggaa attccaggcc aattgtggca 120
 tagattttat catattctgg attttttgga ttcttttgtt ttctcatcac tggattcagg 180
 aaagcctgtt gtgtccacca tctccaaagg aggttacctg cagggaaatg ttaacgggag 240
 gctgccttcc ctgggcaaca aggagccacc tgggcaggag aaagtgcagc tgaagaggaa 300
 agtcacttta ctgaggggag tctccattat cattggcacc atcattggag caggaatctt 360
 catctctcct aagggcgtgc tccagaacac gggcagcgtg ggcatgtctc tgaccatctg 420
 gacggtgtgt ggggtcctgt cactatttgg agctttgtct tatgctgaat tgggaacaac 480
 tataaagaaa tctggaggtc attacacata ttttttgaa gtctttggtc cattaccagc 540
 ttttgtaaga gtctgggtgg aactcctcat aatacgcctt gcagctactg ctgtgatata 600
 cctggcattt ggacgctaca ttctggaacc attttttatt caatgtgaaa tccctgaact 660
 tgcgatcaag ctcatcacag ctgtgggcat aactgtagtg atggctcctaa atagcatgag 720
 tgtagctgg agcgcccgga tccagatttt cttaaccttt tgcaagctca cagcaattct 780
 gataattata gtccctggag ttatgcagct aattaaaggt caaacgcaga actttaaaga 840
 cgccctttca ggaagagatt caagtattac gcggttgcca ctggcttttt attatggaat 900
 gtatgcata gctggctggg tttaacctca ctttgttact gaagaagtag aaaacctga 960
 aaaaaccatt ccccttgcaa tatgtatata catggccatt gtcaccattg gctatgtgct 1020
 gacaaatgtg gcctacttta cgaccattaa tgctgaggag ctgctgcttt caaatgcagt 1080
 ggcagtgaac tttctgagc ggctactggg aaattttctca ttagcagttc cgatctttgt 1140
 tgccctctcc tgctttggct ccatgaacgg tgggtgtgtt gctgtctcca ggttattcta 1200
 tgttgctctc cgagagggtc acctccaga aatcctctcc atgattcatg tccgcaagca 1260
 cactcctcta ccagctgtta ttgttttgca ccttttgaca atgataatgc tcttctctgg 1320
 agacctcgac agtcttttga atttctcag ttttgccagg tggtctttta ttgggctggc 1380
 agttgctggg ctgatttata ttcgatacaa atgcccagat atgcatcgtc ctttcaaggt 1440
 gccactgttc atcccagctt tgttttcctt cacatgcctc ttcatggttg cctttccct 1500
 ctattcggac ccatttagta cagggattgg ctctgctatc actctgaact gagtccctgc 1560
 gtattatctc tttattatat gggacaagaa acccaggtgg tttagaataa tgtcagagaa 1620
 aataaccaga acattacaaa taatactgga agttgtacca gaagaagata agttatgaac 1680
 taatggactt gagatcttgg caatctgccc aaggggagac acaaaatagg gatttttact 1740
 tcattttctg aaagtctaga gaattacaac tttggtgata acaaaaagga gtcagttatt 1800
 tttattcata tatttttagca tattcgaact aatttctaag aaatttagtt ataactctat 1860
 gtagttagat aaagtgaata tgcagttatt ctatgagtcg cacaattctt gagtctctga 1920
 tactaccta ttgggggttag gagaaaagac tagacaatta ctatgtggtc attctctaca 1980
 acatatgtta gcacggcaaa gaaccttcaa attgaagact gagatttttc tgtatatatg 2040
 ggttttgtaa agatgggttt acacactaca gatgtctata ctgtgaaaag tgttttcaat 2100
 tctgaaaaaa agcatatc atgattatgg caaagaggag agaaagaaat ttattttaca 2160
 ttgacattgc attgcttccc cttagatacc aatttagata acaaacactc atgctttaat 2220
 ggattatacc cagagcactt tgaacaaagg tcagtgggga ttgttgaata cattaaagaa 2280
 gagtttctag gggctactgt ttatgagaca catccaggag ttatgtttta gtaaaaatcc 2340
 ttgagaattt attatgtcag atgttttttc attcattatc aggaagtttt agttatctgt 2400

catttttttt	tttcacatca	gtttgatcag	gaaagtgtat	aacacatctt	agagcaagag	2460
ttagtttggt	attaaatcct	cattagaaca	accacctgtt	tcactaataa	cttacccttg	2520
atgagtctat	ctaaacatat	gcattttaag	ccttcaaatt	acattatcaa	catgagagaa	2580
atcaccaaca	aagaagatgt	tcaaaaataat	agtcccatat	ctgtaatcat	atctacatgc	2640
aatgttagta	attctgaagt	tttttaaatt	tatggctatt	tttacacgat	gatgaatttt	2700
gacagtttgt	gcatttttct	tatacatitt	atattcttct	gttaaaatat	ctcttcagat	2760
gaaactgtcc	agattaatta	ggaaaaggca	tatattaaca	taaaaaattgc	aaaagaaatg	2820
tcgctgtaaa	taagatttac	aactgatgtt	tctagaaaat	ttccacttct	atatctaggc	2880
tttgtcagta	atttccacac	acacacacac	tttttatata	tatatatata	tatatatata	2940
tagtggaact	tacaaatgag	agtaatatata	tgatgaaatt	ttgaactgtt	atttataaac	3000
atctaaggta	aaatggtttag	tcatggccag	agtatgtttc	atcctttaat	ttttgtccat	3060
ttgaaaataa	ggatttttga	aagaattata	ccaattaaaa	ttattaaagg	caaacataga	3120
attcataaaa	aattgtccaa	agtagaaatg	atgacctata	atttgagca	tttccaattc	3180
agtaatttca	attttgctct	tgaaaacatt	taatataat	ccaagactga	catttcttta	3240
gctgaaccta	acgtttgggt	ctctgagtga	atttataata	actccttctt	tccttagcat	3300
agggttttca	aaatttgatt	tataaattct	atttccagta	aatattgttc	atttgtccac	3360
atctctccct	atgatatgtt	gctggaggta	agaatttctt	tcatattcct	attttttttt	3420
tccccataga	ctaggctcat	agaattttaa	caagcaaatt	ttcctgagct	ttttcttgcc	3480
aaatgaaaga	agactggtaa	atttctcatag	agaggtttgt	gtagtctctg	gctcttcttg	3540
gggttaatgt	gcttatattc	acagtggcaa	atttgtctca	gactttaatt	tatttatttt	3600
tgatttgaat	ttctctttta	aagtatcaat	ttaaaaggta	actagaatta	ttctttctca	3660
ttttcaaaaag	tgattttttgc	attattaaat	ttccttgcca	ttgtaatgcc	atttcacgca	3720
gaaaaaaagt	cagccagtaa	ttaagaaaaa	aagtgatgga	gattaagtag	tattttggct	3780
tatttttagg	actcatcatg	agaagacaca	gttcctttta	tcaggaaatt	aatatccata	3840
attttcactc	aaaattgcag	tatgtaaagc	agattctcaa	aaactctcct	gaacacttat	3900
ttatatatat	gtttttatat	aagtaaaatt	tttctcatat	ttttatacga	tatgcacaca	3960
cacacataca	tgcacatact	acttactaca	tgttctgtac	ttgtactttg	taccatgcat	4020
attcaaagt	ttatatacat	aagttttatta	taacataaac	agtaaaagta	atgaatactg	4080
tttaaaataa	ctaataatgt	attttttaat	ttttgtgggg	atggattctc	aaatacttgt	4140
gatttttaaaa	gattctaaag	ctaaaacaca	acttgatttt	aaaaagaatg	attctcctta	4200
cacaattata	aatatttgca	gtaaatat	tccttataat	actgttttga	ccccatttaa	4260
aaagtattag	attatattcc	tttgatccaa	tgaaaactga	accttataaa	tggttagctg	4320
aaagtagacc	ttattcttgt	ccttcttttag	aagagtaaag	atttgtccta	gggaagatgg	4380
ctgacttcgg	ttcccaacat	gcgtatgcat	ttagactgta	gctcctcagc	cctgtggaca	4440
caaaatttgg	acagcttatt	aggttacgtt	agcaatgcat	gacggtttct	ccaacactaa	4500
gatattcacg	ttgaaacaga	tttctgttct	gtcttatgtg	tctggtaaaa	ttgtttcccc	4560
aattacaatt	tgacatatca	atagagggtt	aacaagagta	taattacata	acagaattcc	4620
tcatgaactg	taatcagttc	acaggaaaat	cattatttta	tcttgatttg	cagatgaata	4680
tactgctaag	aaagggagca	actctgacct	ttgttaaagt	tgatcttttg	taattgaggt	4740
ataaggtatg	aaaagataaa	aaaccgaagg	ccagagaatc	aggaaatgaa	agatagtatg	4800
gactgaaggt	aacaatattt	taatgttatg	caatatagcc	agagaaatat	taaaaattag	4860
ttgtttgctg	tgcataagtg	gatctcgcag	gaagctaagt	aaacctaaagc	ttcagtgcct	4920
ctcacttaga	catgttccat	tcgaggtcct	gaacctaaact	ttgtattagg	aattctgtac	4980
taatttttgt	gaagaagacc	agcaaagtgt	tgtacacttc	tacccccaca	aaatctgcat	5040
tgtccatgtg	agtaaagtaa	aataattcct	gttatttttt	tctgttagaa	ataagtatgg	5100
aggatatgtt	tttaaaaaatt	tatgagttaa	ttgaaatatc	catatataac	aagtgacttt	5160
ctcacaaat	atatgatgtg	atatataggg	agatagtttc	actttcatca	tattttatac	5220
gttgattctg	aactatagaa	aaataataaa	tggtgatttta	attatagctc	ttagttggga	5280
aagaaatata	gagagatgtg	ggatttgaat	gcccatgaaa	gacattttat	tttacttgaa	5340
tatattcttg	cttcacttta	ccctccataa	tatgttgtac	attagtgctg	atcaagttta	5400
cagagttaca	ttttgctttc	ctaaccattc	agtcaggaat	taaaatatgg	cattgtataa	5460
caactgggaa	gaagctcata	gtggatatata	attagagtag	ataatgggtc	accttgatag	5520
cctctgttta	cattacttgt	atatgggcaa	aataattatt	acctatacgt	gtatttaagc	5580
ttaattttca	tataaacagt	atttttaatc	tatgttaaaa	tagataatat	ctaaaagtgt	5640

gatctctagg tagtccttag tttattagta ctgtacttca aaaagatttt taaataggct 5700
 cggcacgggtg gctcatgcct gtaatcccag cactttggga ggctgaggcg ggcgaatcac 5760
 ctgagggtcag gagttcgaga tcagcctggc caacatgggtg aaaccctgtc tcaactaaaa 5820
 atataaaaaat tagccggggcg tgggtggcagg cgctgtaat ccagctact cgggaggctg 5880
 aggcaggaga atcacttgaa cccaaggggc agaagctgca gttagccaag atcgcatcat 5940
 tgcactccag cctaggggac aagagcgcga gacttcatct c 5981

<210> 442

<211> 337

<212> DNA

<213> Homo sapiens

<400> 442

gatggagggtt gaagtgagca gagatcatgc cagcctgggt gacagtgaga ctctgtctca 60
 aacagaatta aggaaaaaag aaagaaagaa aaagagagag aggaaattcc aggccaattg 120
 tggcatagat tttatcatat tctggatttt ttggattctt ttgttttctc atcactggat 180
 tcaggaaagc ctgttgtgtc caccatctcc aaaggagggtt acctgcaggg aaatgttaac 240
 gggagggtgc cttccctggg caacaaggag ccacctgggc aggagaaagt gcagctgaag 300
 aggaaagtca ctttactgag gggagtctcc attatca 337

<210> 443

<211> 739

<212> DNA

<213> Homo sapiens

<400> 443

gaattcgaac cccttcggat tctaatacaag aaaatgattt gctatgggaa gagaagtttc 60
 ctgaaagaac aactgttact gaattacctc agacttcaca tgtatcattc tccgagcctg 120
 atattccgtc ctcaaaaagt actgagttac ctgtggactg gactattaaa acgcgactcc 180
 ttttcacctc ttctcaaccc ttacctggg cagatcattt gaaagcacag gaagaagctc 240
 aaggtcttgt ccagcattgt agggcaacag aagttacttt gcctaaaagt atacaggatc 300
 ccaaactctc ctctgagctc cggttgtaoct tccagcagag ccttatctat tggctccacc 360
 ctgctttgtc ttggctacca ctgttccctc gtattggagc tgatagaaaa atggctggaa 420
 agacaagtcc ttgggtcaaat gatgcaaccc tgcagcatgt tttaatgagt gactgggtctg 480
 tgagctttac ttctctatat aatttgctga agacaaaact ttgcccctat ttctacgttt 540
 gtacctatca gtttactgtc ctgttccgag cagcaggatt agctggaagt gacttaataca 600
 cagctctcat atctccaaca actcgaggtt taagagaagc tatgagaaat gaaggtattg 660
 aattttctct gcctttaata aaagaaagtg gccataagaa ggagacagca tctggaacaa 720
 gcttgggata tggggagga 739

<210> 444

<211> 738

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(738)

<223> n = A,T,C or G

<400> 444

```

ttttttttt ttcgttnaaa agaaatttta tttctanant ggaatgattt ggatgtgacc 60
tgataaatac agtttggtat tngggtctca ttaaattaat cagctttttc acactggggt 120
aaagaaacag atgatgatac tagggaatgg aaacaaaatt ggaaacctgg gttatttggg 180
gatttatatt gtactctgca cagttgccct ttttttagg cgtgttccct ggaaaagagg 240
gacggatgaa cctggaagta agtaaaagac attctaggtg tgtagcatca aggcagttaa 300
tatccaagca tcagctttct ctttatacat ctacactgca tggcctgcac caaataagga 360
actgaaccag gggatgtgtt ttacctccac agctgcctcc ttccatcana gcaccttgat 420
gaacttaatg tctagtcaca cgtcattggc atgttttctc cccagcattt aattacaaag 480
ctttctttct ttggatagga tcagttctta agagcagccc cggtaactgg aggaatggga 540
gccgttttga tganaaaaat gggtttgggt ttcagatctt ccaattataa atgtagtctc 600
tcagcaccac attccgtaaa gatgatttcc caagtaacgg tatttgacta agttgtctca 660
gagtgttagg ggcaaaccac agttagtaag ctccctatga acaaccccca tatcaagtac 720
tttgtccatt tgcaggca

```

<210> 445

<211> 716

<212> DNA

<213> Homo sapiens

<400> 445

```

gcggccgcta gtgctccagc tcgcgctccg ccctcaggca cagcatcccc acgggcctcc 60
acgccaacct gtccgagggc cgccccgtgg gtccggcccg ccgtggcgcc tcatcgctgc 120
tcggcccgga aggttcttct ctgggcaaga tgggattccg ggaggcggtg gcggccggag 180
acgtggattt gcctcaggtg cggagccgca gctacaggag gatgctcgcg aggaccccca 240
gagctccgcc cggaggggtac tgtgaggccg ttaggagctg gcggtggatg acttccgcat 300
tcaaacactg gagccatcac acggaagcac gaggagggta tcctcggcag ctactcccgg 360
tcgctcaagg tgtctctcgc tcgccctcta ggtgcgggag gagctcgagg cccaactaag 420
ctgcttccgg gagctgctgg gcagggcccc cacgcacgcg gacgggcacc agcacgtgca 480
cgtgctccca ggtggacaga cgccttcgtg ggctgagca cttgcggccg gcacatgtcc 540
gctcaccgcg tgtccggggc cctggcgcgg gtccctggaag gtaccctagc gggccacacc 600
ctgacagccg agctgatggc gcaccccggc taccctagtg tgctcccccac cggcggtgc 660
ggtgaaggcc ccgacgcttt ctctttgtct ttgggaagcg gcttgcatag agcttg 716

```

<210> 446

<211> 641

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(641)

<223> n = A,T,C or G

<400> 446

```

gctncagctc gcgctccgcc ctcaggcaca gcatccccac gggcctccac gccaacctgt 60
ccgaggnccg ccccggtggg cggccccgcc gtggcgccctc atcgctgctc ggcccggag 120
gcttnttctt tggcaagatg ggattccggg aggcggnggc ggccggagac gtggatttgc 180
ctcaggtgcg gagccgcagc tacaggagga tgctcgcgag gacccccaga gctccgcccc 240
gagggacttg tgaggccgtt aggagctggc gnggatgac ttccgcattc aaacactgga 300
gccatcacac ggaagcacga ggagggtatc ctccgcagct actcccgtc gctcaagggtg 360
tctntcgctc gccctctagg ngcgggagga gctcgaggcc caactaanct gcttccggga 420
gctgctgggc agggccccc cgcacgcgga cgggcaccag cacgtgcacg tgctcccagg 480
nggacagacg ccttcgtggg cctgancact tgcggccggn acatgttccc tcaccccgcg 540
gtccggggcc ttggcgcggg tcctggaagg taccctacgg gccacaccct gacagccgaa 600

```

ctgatggccc accccggcta cccangtgt gcctccaccc g

641

<210> 447

<211> 652

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(652)

<223> n = A,T,C or G

<400> 447

```

gaattcgaac cccttcgctt ttagaaaatt gtatatgcag ctggatgaag gcagcctcac 60
ctttaatgcc aaccagatg agggagtga ctactttatg tccaagggtg tcctggatga 120
ttcgccaaag gaaatagcaa agtttatctt ctgtacaaga aactaaatt ggaaaaaact 180
gagaatctat cttgatgaaa ggagagatgt cttggatgac cttgtaacat tgcataat 240
tagaaatcag ttcttgccaa atgcactgag agaatttttt cgtcatatcc atgcccctga 300
agagcgtgga gagtatcttg aaactcttat aacaaagttc tcacatagat tctgtgcttg 360
caaccctgat ttaatgcgag aacttggcct tagtcctgat gctgtctatg tactgtgcta 420
ctctttgatt ctactttcca ttgacctcac tagccctcat gtgaagaata aaatgtcaaa 480
aagggaat  attcgaaata cccgcgcgcg tgcacaaat attagtgaag aattttgtan 540
ggcatcttta tgacaatatc tacccttatt gggccatggn ggctggcata aaaaagcacc 600
aattggctaa ggactttcaa gttttttact ttcagaactt aaaagcttac cc 652

```

<210> 448

<211> 677

<212> DNA

<213> Homo sapiens

<400> 448

```

gaattcgaac cccttcggcg cctggcagag gtgaaggact ccctggacat cgagggtcaag 60
cagaacttca ttgacccctt ccagaacctg tgcgagaaag acctgaagga gatccagcac 120
cacctgaaga aactggaggg cgcgcgcctg gactttgact acaagaagaa gcggcagggc 180
aagatccccg atgaggagct acgccaggcg ctggagaagt tcgaggagtc caaggaggtg 240
gcagaaacca gcatgcacaa cctcctggag actgacatcg agcagggtgag tcagctctcg 300
gccctggtgg atgcacagct ggactaccac cggcaggccg tgcagatcct ggacgagctg 360
gcggagaagc tcaagcgcag gatgcgggaa gcttcctcac gccctaagcg ggagtataag 420
ccgaagcccc gggagccctt tgaccttgga gagcctgagc agtccaacgg gggcttcccc 480
tgcaccacag cccccaagat cgcagcttca tcgtctttcc gatcttccga caagcccatc 540
cggaccccta gccggagcat gccgcccctg gaccagccga gctgcaaggc gctgtacgac 600
ttcgagcccg agaacgacgg ggagctgggc ttcgatgagg cgacgtcatc acgctgacca 660
accagatcga tgagaac 677

```

<210> 449

<211> 603

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(603)

<223> n = A,T,C or G

```

<400> 449
ttttttgtan aaagagacat ttaatacttc tgtttacaaa attcaggcgt acatttcagt 60
ttgccctgga cctgtgccaa agctgtgtgc tcatctctgc gcccctcatg tacttctgac 120
gaggggggtg cagggcaggg cagagcagag cctgggggtcc ggaggcttca ctggaccaca 180
gggggagggg aatgtgaatg tggcctggcc canagaactc cccatttcat cgattttgca 240
ttgggcgata gaggaagcag atgtcggggc tgccctgcctt ggtctanagg agatggctgg 300
ggccacttcc cacagggtga agtggcagcg gctcagcaag gggagcctgg ccaccagggg 360
ctgggacatg cgctcactgg aacctttgtg cttggccctc ggcagcggcg ctgtgggtccc 420
gtgtgaggtg tgctgggggt ggggtgtgggt ggctgggtgt ggcagcttgt gccagagtga 480
cacaggcctc cctgggttgg gatgggggca agttaaaaag ctgaaaagggt acttggcttt 540
ctgagggcgg gcttgggagc aggccttgca gganaccatg ttctctgtcc tcagcagatc 600
cac
603

```

<210> 450

<211> 678

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(678)

<223> n = A,T,C or G

<400> 450

```

gaattcgaac cccttcgcat caatataana tgccacccat ctgcagttaa tttcttttcc 60
tcatcatgtg attaaaagtg gtgattcagt gggaaactggg aatgttttta gctgggtggtg 120
gaaggctgcc tacactgggc actgttttag attctcatat catttaaaca gcaaggaggt 180
tcagggaaga ataaccgtag ccttgggttaa tccactaggg cttttgtgag taggagagct 240
gatacctcac attcttagca ggtgaaaact tgccatgatg gaaacagata gtgaagagtt 300
actgacgtat cccaaattat atgctgtgac ataaattccc agcatgcccc gccctgattt 360
ctgagttcat aagtaattct agtgaacctt agtaggaatt ctgggtaaga aaatgaggtt 420
gccattggtc ttgtttgcat caccaagacc agacatccag aagagccctt caccttgaaa 480
agcagacaga ttttaaatta accccctcct tcccactcac cttcatctcc ctaagagttt 540
tggccattta attccacatt ttgaaaggaa tacattgggtg aaatttgga agagaatctg 600
tgctatgcaa tgtttcatta aaatcttcag tttttcaagt ctctctaaaa ataatttgta 660
gatctatctt gcatggat
678

```

<210> 451

<211> 651

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(651)

<223> n = A,T,C or G

<400> 451

```

tttttcatca acaaaaaatca agcattttcn tttttttgaa acaagaaaag cgcatcgtn 60
aaaccaagat tctgtacaat attctaacat tatatgtaca taaaattata ttactcataa 120
ctatatggaa aagtcttatt tgtagaatat ggctggcaac aaagaaagac ccataccatt 180
tagcgtttga agcagggcag gtagcaagag aacattagca aagacacctt tgtgcctgga 240
tacacaatcc tgctactaag ttatgtgact aaccagcaca ctctaagttc tgtgggttgt 300
tcgttgtttc acattctagt agggaattct gcagcaggcg atgcgaaaaa naanacatgg 360

```

```

tcaaataaaa tgtgaaatgc tgtttaaaaat ctgcatattg gctatgataa tgggtttgng 420
aatccaagtt gcattggaag ttcaactcatt ctccattcat tatgcatgcc tccagtgtatt 480
taatgaattt cagcaggngg aaaagacagc tttgaacaga tcagatgggc tgtgagtcan 540
attcttgatt ctttttcctc atttggtctc tgaatgttgc anaaaactgg tttgttacac 600
tggggaagga gagagtgaag accctccagt tggttcctca gtcagctccg t 651

```

<210> 452

<211> 679

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(679)

<223> n = A,T,C or G

<400> 452

```

gaattcgaac cccttcgcat tgctcagccn nctaccactg ctaagagcca tctccaccag 60
aagcctggcc agacctggaa gaacaaagag catcatctct ctgacagaga gtttgtgttc 120
aaagaacctc agcaggtagt acgtagagct cctgagccac gagtgtattga cagagagggt 180
gtgtatgaaa tcagcctgtc acccacaggt gtatctaggg tctgtttgta tcctggcttt 240
gttgacgtga aagaagctga ctggatattg gaacagcttt gtcaagatgt tccctggaaa 300
cagaggaccg gcatcagaga ggatataact tatcagcaac caagacttac agcatggtat 360
ggagaacttc cttacactta ttcaagaatc actatggaac caaatcctca ctggcaccct 420
gtgctgcgca cactaaagaa ccgcattgaa gagaacactg gccacacctt caactcctta 480
ctctgcaatc tttatcgcaa tgagaaggac agcgtggact ggcacagtga tgatgaacct 540
tcactaggga ggtgccccat tattgcttca ctaagttttg gtgccacacg cacatttgag 600
atgagaaaga agccaccacc agaagagaat ggagactaca catatgtgga aagagtgaag 660
atacccttgg atcatggta 679

```

<210> 453

<211> 630

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(630)

<223> n = A,T,C or G

<400> 453

```

gaattcgaac cccttcggaa ggccaagggg ntagaaggng gctccggccc cagctgtcgt 60
gaagaagcag gaggctaaga aagtgggtgaa tcccctgttt gagaaaaggc ctaagaattt 120
tggcattgga caggacatcc agcccaaaaag agacctcacc cgctttgtga aatggccccg 180
ctatatcagg ttgcagcggc agagagccat cctctataag cggctgaaaag tgcctcctgc 240
gattaaccag ttcaaccagg ccctggaccg ccaaacagct actcagctgc ttaagctggc 300
ccacaagtac agaccagaga caaagcaaga gaagaagcag agactgttgg cccgggccga 360
gaagaaggct gctggcaaag gggacgtccc aacgaagaga ccacctgtcc ttcgagcagg 420
agttaacacc cgtcaccacc ttggtggaga acaagaaagc tcagctggtg gtgattgcac 480
acgacgtgga tcccatcgag ctggttgcct tcttgccctg cctgtgtcgt aaaatggggg 540
tcccttactg cattatcaag ggaaaggcaa gactgggacg tctagtccac aggaagacct 600
gcaccactgt cgccttcac aggtgaactc 630

```

<210> 454

<211> 677
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(677)
 <223> n = A,T,C or G

<400> 454
 gaattcgaac cccttcgccc gcatgcggna catcccccttg gccccagggc cagactggcg 60
 cgatctgccc aacatcgagg tgcggctctc agacggcacc atggccagga agctgcggta 120
 taccacccat gacaggaaga acggccgcag cagctctggg gccctccgtg gggctctgctc 180
 ctgctgggaa gccggcaaag cctgcgaccc cgcagccagg cagttcaaca ccctcatccc 240
 ctgggtgctg cccacacccg ggaaccggca caaccactgg gctggcctct atggaaggct 300
 cgagtgggac ggcttcttca gcacaaccgt caccaacccc gagcccatgg gcaagcaggg 360
 ccgcgtgctc caccagagc agcaccgtgt ggtgagcgtg cgggagtggt cccgctccca 420
 gggcttccct gacacctacc ggctcttcgg caacatcctg gacaagcacc ggcaggtggg 480
 caatgccgtg ccaccgcccc tggcaaagcc attggcttgg agatcaagct ttgtattgtt 540
 ggccaaagcc cgagagagt cctcagctaa aataaaggag gaggaagctg ctaaggacta 600
 gttctgcctt cccgtcaccg ctgtttcttg caccaggaat cccccacaat gcacttgatg 660
 gtgggggtttt aacatgt 677

<210> 455
 <211> 598
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(598)
 <223> n = A,T,C or G

<400> 455
 ttttttgggt tataggagag atttatttga agaaatatta caacatataa aaactacata 60
 aagtcttaat ttccactcat acagtggtag atttgatata atgcataata aaaaactttt 120
 aaaatccaga atgcacaaag tactgcacaa tttgatcact aaatcattag ttgataagcg 180
 aacctcacac aacagcttca tgtcagccaa ggccacaaac accatgtacc acacatgtga 240
 acggacagat tgacatgtta aaaacacaac atcagtgcac gttggggatt cctgggtgcc 300
 gaaacagggg tgacgggagg gcagaactag tccttagcag ctctctctc ctttatttta 360
 gctgaggcac tctctcgggc tttggccaac atacaaagct tgatctccaa gccaatggct 420
 ttggccaggg gcggtggcac ggcattgccc acctgccggg gcttngtcca ggatgttgcc 480
 cgaagagccg gtaggtgggc aagggaagcc cctgggggaag cgggcacact cccggacgct 540
 naccacacgg tgctgntttt ggggtggagca ccgcggcctt gcttgcccat gggctcgg 598

<210> 456
 <211> 574
 <212> DNA
 <213> Homo sapiens

<400> 456
 ggaattcgaa ccccttcggg gcggggagcc ccgtagaacc gagggggctg gcccgggggt 60
 cccgggggag gtggagatgg tgaaggggca gccgttcgac gtggggccgc gctacacgca 120
 gttgcagtac atcggcgagg gcgcgtacgg catggctcagc tcggcctatg accacgtgcg 180


```

caagactcgc gtggccatca agaagatcag ccccttcgaa catcagacct actgccagcg 240
cacgctccgg gagatccaga tccctgctgcg ctcccgccat gagaatgtca tcggcatccg 300
agacattctg cgggcggtcca ccctggaagc catgagagat gtctacattg tgcaggacct 360
gatggagact gacctgtaca agttgctgaa aagccagcag ctgagcaatg accatatctg 420
ctacttcctc taccagatcc tgcggggcct caagtacatc cactccgcca acgtgctcca 480
ccgagatcta aagccctcca acctgcttca tcaacaccac ctggcgacct ttaaaatttg 540
tgaatttccg gcctggcccc cggattgccc gaat 574

```

```

<210> 457
<211> 546
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(546)
<223> n = A,T,C or G

```

```

<400> 457
ttttttgaca catctctata tttatatatt agacgggtca gggaggtggc aggggcgccg 60
ggctctccac gccccccagc tccacttctg ctccaccacac acagaagcag cgagggcacg 120
cgaagtgaca gctttgacag ggaggggatt cggccccggc tggctcctca gggatgctag 180
cccttgagac taaggaatgt tccctcaggg aaactagggg ggggtttgaa tganatgagg 240
ggggcaggca tggccctgag tccctactca ggcggcccca ccctccacct ctgcccttca 300
gcaggttggg gcagccagaa cccttcatt ccagaactgc cagagactgg gacgctgggg 360
aaggttaagg cgcagcagca gcagcgggag attgaactgg ggccacctga gctcccagg 420
ccccgtgggg agggcggggtg gggaggaaaa ggccttggcc tgcctgaagc tggaggcctc 480
agcaaaggag agaggtggcc agggccatgc tccaccccg cctgggctgc caanggtccc 540
gggctg 546

```

```

<210> 458
<211> 674
<212> DNA
<213> Homo sapiens

```

```

<400> 458
gaattcgaac cccttcggtg ttattaagaa ctaagagaat agcttgccag atacaaatgg 60
aaacaccttc caaatgagtc ggagaaaatg tcttgagta ttatgggtaa aatagcaaag 120
agcttgggaa tacagtttgc taatatcaag tcttaacaa cgaccattct tcattcaaga 180
ttagttgtgt ataaatacat gcttcttcag gaggttgactt agaaaacaag caaacaaca 240
aacatcagaa actatttaca actgggagca atccttgaag aacataaaga atataaatat 300
caacaaaggc tgaaaactct tttttagatt aaagatcaaa tggacatgtc atcggaatgt 360
attgtatggc tcttgattaa atcctggagc aaagtggaga gtgaggaaca actgtaaaga 420
atgtgaatac ggactgtgta ttagataaca gtaccataaa tttcctggat gggataatta 480
tgttgtgact atgtaagaga atattttgcc cttagaagat atatgatgaa gcatttagaa 540
gtaaaagtatc atgacatctt gcaaataact ttcaagtgat tcagccagat atataaaaat 600
tatatataac acattatata atttatattt atataattat aatacattat ataatttata 660
cattataatt atat 674

```

```

<210> 459
<211> 682
<212> DNA
<213> Homo sapiens

```

<400> 459

```

tttttttaaa tccatggcctt gttaattgtc atcccagtta ttacatgtg actatagaga 60
ctgcattctc ccagctgcca ggccgccagg gctttgccac tggataaatt tataacacga 120
ctaattaaaa tgaatttgct tgcaataagg ttctgtgtgc tatttgtggg agaggagtta 180
ttaaaatttt cagtacagta atagtaaact tgaatgcaaa gtaataataa tcatacattt 240
ttaattacat gtttaataacc catttggtc atgtagaact attctgaaaa ttacttggga 300
tcagcacaat gtctttttgt gcttagtagt atccaaagac atccttctga atgggcttag 360
caatatgcac tgtcatcaag atacagctgt ttgatgacag acacacagtg tgttcctatg 420
atactttgca caagatcagc tatgacaaat acaagttcat ttgcttatt gcaggcaaat 480
aatgtccttt gcaggaaactt ggatggagcc agaggccatt attctaagt aaatacctca 540
ggagtggaaa accaaataacc atatgttctc acttacaagt gggaactaag ctatgggtac 600
acaaacgcat atagagtaat ggactctggc gactcatact acatattgag tacaatgtac 660
actacttggg tgatgggtgc ac                                     682

```

<210> 460

<211> 663

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(663)

<223> n = A,T,C or G

<400> 460

```

gaattcgaac cccttcgcgg ggccgcgcgag cgccgccagc tcgggggcagc ggaacccaga 60
gaagctgagg gggcggtagc ggccgcgcgac gcgcgcgcga cgactccgc ggcgtgtgcc 120
agcctcttcc cgccgcgcgac gcccttttcc tccctccctt acgtccccga gtgcggcagt 180
accgcctcct tcccagccgc gcggcttctt ccagacctct cggcgcggtg gagccctatt 240
cccagaggca ggtggtgctg accctgtaac ccaaaggagg aaacagctgg ctaagctcat 300
cattgttact ggtgggcacc atgtccttga agcttcaggc aagcaatgta accaacaaga 360
atgaccccaa gtccatcaac tctcgagtct tcattggaaa cctcaacaca gctctggtga 420
agaaatcaga tgtggagacc atcttctcta agtatggccg tgtggccggc tgttctgtgc 480
acaagggcta tgcttttgtt cagtactcca atgagcgcca tgcccgggca gctgtgctgg 540
gagagaatgg gcgggtgctg gccgggcaga ccctggacat caacatggct ggagagccta 600
agcctgacag acccaagggg ctaaaganaa gcagcatctg gcatatacag gctcttcgac 660
tac                                     663

```

<210> 461

<211> 612

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(612)

<223> n = A,T,C or G

<400> 461

```

ttttttggga tccaatctnt ttattgtcag ggtccccctc ctgnggcccc ccgccaaacc 60
tatagaaaaa acccaagcct gggagtgtcc tggggagggg aggtagtatg gggaaacccc 120
tgtgctctac cctntggcct gggcagtgca nacaggagg gctcatgggg aaggagtagg 180
ccagtaactc cacctgcana ggacatggca ctggctggga tgcgttgggg gaggaggcgc 240
ctgctgccag ctttctntg gtaccgcctg gggggtggca tccagggttg ggtgcccggc 300

```

```

ttgaggcctg gggcagcgat gcccttcacc tgctggnggc cattgctcct gtcaggctgc 360
ttactgcaag gcccacatcat ccgcgtctgt gtcttggtg tggtccagct ctccctcgct 420
gngtgtcagg agcccttcct catcgccgtc gtctcgggtc cgtgcttccc cctggggcag 480
gcctgcctca naagttgtgt tctcttgggg ggctgggtggc cgggttgttg caccgcaccg 540
caccaccact ggcaccggca ccgntgcacc accaccgccg ccgccgccgn tggngccacc 600
ttcatcacc tt 612

```

<210> 462

<211> 672

<212> DNA

<213> Homo sapiens

<400> 462

```

gaattcgaac cccttcggat ggaagggggc ggggcagcgt cggggaaagg aagggccgga 60
ggcgcggcgg cgggcggccg agagggggcg cggcggcggc ggcggcgggg ttcccgcgcc 120
gcggagcccg gcccgagagc cgcgtccacg ttccctgcctc ctgctcccgc cgccctgggg 180
cgccgccatg acgcccgatc tgctcaactt cagccccaga tgtaccaag ctctcgact 240
ctaacaagga gaacgcgtg cacagctaca gcacccagaa gggccccctg aaggcagggg 300
agcagcgggc gggctctgag gtcacagcc gggttgggcc tcggaaggcg gacgggcagc 360
gtcaggcctt ggactacgtg gagctctcgc cgctgaccca ggcttccccg cagcggggcc 420
gcacccagc ccgcactcct gaccgccctg gccaaagcagg aggagctgga gcgggacctg 480
gccagcgtc ccgaggagcg gcgcaagtgg tttgaggcca cagacagcag gacccagag 540
gtgcctgctg gtgagggggc gcgccggggc ctgggtgccc cctgactgag gaccagcaaa 600
accggcttag tgaggagatc gagaagaagt ggcaggagct ggagaagctt gcccttgccg 660
gagaataacc gg 672

```

<210> 463

<211> 562

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(562)

<223> n = A,T,C or G

<400> 463

```

ttttttaaag tataaagtgt tttggaaaaa aaggaaaaan ntctatataa aaatctcttc 60
acatatataa tcctgaagaa ggtgcaagg gtgacccagt gcgagggcg tgctcagata 120
tgcatgtgt gtgtgtgtgt gtgtgtgtgt gtatccgtgt gtacatgtgt gcacgtgtgt 180
gcgtatgtgt ctgtgtgtct gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt ggtgggtgca 240
agtgcacgtg tggcccacag aggggtgggga gaaagcttgg ctttttactt ccatccagga 300
gggaaggagg gcggctggtc ctccagcctg gagggctctg agctgggcgg gacctctact 360
cagccaggct gttgcgcac gactccttct cctggagggc ggccatggca agacgcagg 420
gtccttcag ctgctcgatc tcccgtcag accgtgtctt gatgtggctc aactccacat 480
agacgtcctg gtactttccc naggtgaagc gcttgtcctt ctgcatcatc tggagctcgt 540
cccggaggca ctgcaccttc ct 562

```

<210> 464

<211> 553

<212> DNA

<213> Homo sapiens

<400> 464

```

gaattcgaac cccttcggga ccaggaaccc aggagagcat ggccacgctg cgccggcttc 60
gggaggcgcc gcggcactta ctggtttgcg agaaatccaa cttcggcaac cacaagtcgc 120
gccaccggca tcttgtgcag acgcactact ataactacag ggtttcattt ctcatctctg 180
aatgtgggat actatcggaa gaactgaaaa acctggtcac gaacactgga ccctattact 240
ttgtgaagaa tttacctctt catgaattaa ttacacctga attcatcagt acctttataa 300
agaaaggttc ttgctatgca ctaacataca atacacatat tgatgaagat aatactgttg 360
ccctgctacc aaatgggaaa ttaattttgt cactggataa agacacttat gaagaaactg 420
gacttcaggg tcatccatct cagttttctg gcagaaaaat tatgaaattt agttcagaag 480
aatcgacaat gatgtcatat ttttccaagt accaaattca ggagcatcag ccaaaagtag 540
cactgagccc gtt                                     553

```

<210> 465

<211> 383

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(383)

<223> n = A,T,C or G

<400> 465

```

tttttggaag aaaacacgat ttttaatttt tattttttat gggggacagn gatcatttgc 60
cccaacagcc atntgaagcc aatagtcctg attattaaaa atcacaaagt tatataaatg 120
ntctcctcct tttcgaaaac catgttcatt tttttcccaa naaacagggc tgtctgcaaa 180
gccttgaacg gacagngtaa cccatggagc taacttcggt tcatcaaagt agngacagan 240
atgttccaat agganacaga tcttntntgg aagtatgaag ccagngattg tacacaaata 300
agcttttgcc accactgtgc ttggctcagg acagcaatag gttgatatga aattattagg 360
ctcattattt aggnccgacat tac                                     383

```

<210> 466

<211> 673

<212> DNA

<213> Homo sapiens

<400> 466

```

gaattcgaac cccttcgctc cctcctgcac gcaatggtgg cctatgatcc cgatgagaga 60
atcgccgccc accaggccct gcagcacccc tacttccaag aacagaggaa aacagagaag 120
cgggctctgg gcagccacag aaaagctggc tttccggagc accctgtggc accggaacca 180
ctcagtaaca gctgccagat ttccaaggag ggcagaaagc agaaacagtc cctaaagcaa 240
gaggaggacc gtccaagag acgaggaccg gcctatgtca tggaaactgcc caaactaaag 300
ctttcgggag tggtcagact gtcgtcttac tccagcccca cgctgcagtc cgtgcttgga 360
tctggaacaa atggaagagt gccggtgctg agacccttga agtgcatccc tgcgagcaag 420
aaggtagcgc ggaaccagct tctctgacgg cgctgctctt cgaccagacc caggccgcca 480
ctgaattttg tgtctgtaat ttttctttga cagacagatc cgcagaagga ccttaagcct 540
gccccgcagc agtgtcgctt gccaccata gtgcggaaag gcggaagata actgagcagc 600
accgtcgtct cgacttcgga ggcaacacca agcccagacc ggccaggcct gggatgatctg 660
ctgctgagac gcc                                     673

```

<210> 467

<211> 373

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(373)

<223> n = A,T,C or G

<400> 467

```

tttttactgg aacgacagct tattnttttaa taaaagtcag gggngtcagc agngtcactg 60
gtaanacatg atggcgctcc acgactgacc agcagcgctg ggaagggaca cgcanaaccc 120
accttccaac cagccccaac acatnacana aatgcctgct cgtttgtttt gattcatata 180
caaagttaca aagtatttcc tgccccaat tnttaacgaa aatgaaagaa aaccctanaa 240
tgcggggggtt ttacaagtat attagcccan aacatcctag gcagctgcnc gggccgcggg 300
tgcgggcaggg cgcagggcaa caccctaaagc cccggccagc gcgaaacgga cgcaggcgca 360
tccccagccc tcc 373

```

<210> 468

<211> 573

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(573)

<223> n = A,T,C or G

<400> 468

```

gaattcgaac cccttcgctg ctgtcctact tgatgcttgt cactgtcatg atgtggcccc 60
tngctgtgta ccaccgactg tgggatcgag catatgtgag gctgaagcca gctctgcagc 120
ggctagactt cagtgtccgt ggctacatga tgtccaagca gagagagaga caattacgcc 180
gcagagctct ccaccagaa cgagccatgg acaaccacag tgacagcgaa gaggagcttg 240
ctgccttctg tcctcagctg gacgattcta ctggtgccag ggaattggcc atcacagact 300
ctgagcactc agacgctgaa gtctcctgta cagacaatgg cacattcaat ctttcaaggg 360
gccaaacacc tctaaccgaa ggctctgaag acctagatgg tcacagtgat ccagaggaat 420
cctttgcccag agaccttcca gacttcctt ccattaatat ggatcctgct ggccctggatg 480
atgangacga cactagcatt ggcatgccc gcttgatgta ccgttctccg ccaggggggct 540
gaggagcccc aaggccccac ctgccagccc ggg 573

```

<210> 469

<211> 635

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(635)

<223> n = A,T,C or G

<400> 469

```

tcncgatcta gaactagggt ggacaggctt gctcaagttt caccagagtt antactggcc 60
tctgttcgca gagtttttag ttinnactg cagaattggc agactacag gtttatggaa 120
gttgaagtag caataagatt gctgtatatg ttggcagaag ctcttccagt atctcatggt 180
gctcacttct cagggtgatgt ttcaaaagct agtgctttgc aggatatgat gcgaactgta 240
agtatactgg agataatttt gaccataaat ttctgttttc agtataagct aatgggagtt 300
ccttaattgt tagagcttag tatatgttaa taccggggca ttttgatgtt gcaataaata 360
agaagagggt tcctaacttt ttctgatct agctggtaac atcaggagtc agttcctatc 420

```

```

agcatacatc tgtgacattg gagttcttcg aaactgttgt tagatatgaa aagtttttca 480
cagttgaacc tcagcacatt ccatgtgtac taatggcttt cttagatcac agaggtctgc 540
ggcattccag ngcaaaagt cggagcagga cggcttacct gttttctaga tttgtcaa 600
ctctcaataa gcaaatgaat cctttccttg aggt 635

```

```

<210> 470
<211> 593
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(593)
<223> n = A,T,C or G

```

```

<400> 470
gaattcgaac ccttcggtat taacaaatat ntacatttct atttttataa tccataagga 60
tatgcctggt ttaaataaca tacatatata caatatctat caggaaaacc ctcaagacag 120
cttctagtta aaacctngn tgctgtcctc tcaaactata tttataaaaa tttgctaggg 180
ccaaatccat acttcgagaa taattcatca aattttattt ttaagngaaa agtaaccttt 240
caggcatttc agcagcatac attgacaatc tagggatatat atgtatgtat gtttcttatt 300
gtatgtctat atatgtatgt ggggaggaca ggagtgaatg ttcacacact tttcttgctg 360
actcaactaa attggagaat gtttctgaag aaaattggat gaaattagct gctgagattg 420
agtttctgcc ttaaaatctg aaacaaaaaa agggacaaat tgctggtang atctactgac 480
tgtngccatc accagaacac ttagtttctt cccagacatg aatttctga caggctctga 540
gccagaaaca cactgtgggc gtgcatntgg gtcaccctgg atatgcctcc act 593

```

```

<210> 471
<211> 581
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(581)
<223> n = A,T,C or G

```

```

<400> 471
tttttttaat cangggacat ttattaacat gcttcaaaag tgaccaaaagt gtccagccag 60
cacaatagcc gaggaatca acgttctctt agtgtgtgat ctggtccaaa acaccaaata 120
aatagggtta ggaataacct caaataaatt gtaatttaac ttcgccccaa attatacatc 180
ctctactgct ctccctgct cctgtaaaga tactagcggg aggggagaaa gctcaaatga 240
ctctgtaatt tagaattaca accagagaag aaatacttca agcacaataa agacgttoca 300
ttgaagagcg acattcattc tgggaatggt gttttgaaaa caactcttnt ggggggaattc 360
aaaaggctact gaacaaagca acataaagta agttttgggt tgttttgcaa aataaaaaata 420
tacaattgag tggaccagat ggcaaaaaaca taccaattac aatctgaatg ctatatttaa 480
aacccttaaa ttctgaaggc ctgaatatca acaaacctat ttatgtttat gatcctaaaa 540
agacattaaa tattattaaa cccccaactt ccaaaacata g 581

```

```

<210> 472
<211> 674
<212> DNA
<213> Homo sapiens

```

<220>
 <221> misc_feature
 <222> (1)...(674)
 <223> n = A,T,C or G

<400> 472
 gaattcgaac cccttcggat ggcgatgatgt ntcacagaaa gttctccgct cccagacatg 60
 ggtccctcgg ctctctgcct cggaagcgca gcagcaggca tcgtgggaag gtgaagagct 120
 tccctaagga tgaccctgcc aagccgggtcc acctcacagc ctctcctggga tacaaggctg 180
 gcatgactca catcgtgcgg gaagtcgaca ggccgggatc caaggtgaac aagaaggagg 240
 tgggtggaggc tgtgaccatt gtagagacac caccatggt ggttgtgggc attgtgggct 300
 acgtggaaac ccctcgaggc ctccggacct tcaagactgt ctttgctgag cacatcagt 360
 atgaatgcaa gaggcgtttc tataagaatt ggcataaatc taagaagaag gcctttacca 420
 agtactgcaa gaaatggcag gatgaggatg gcaagaagca gctggagaag gacttcagca 480
 gcatgaagaa gtactgccaa gtcacccgtg tcattgcccc caccagatg cgcttgcttc 540
 ctctgcgcca gaagaagccc acctgatgga gatccagggt aacggaggca ctgtggccga 600
 gaagctggac tgggccccgc gagangcttg agcacaggta cctgtgaacc aagtgtttgg 660
 gcaggatgaa aatg 674

<210> 473
 <211> 646
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(646)
 <223> n = A,T,C or G

<400> 473
 ttttttcagn ggaaaataac ttttattgan accccaccaa ctgcaaaatc tgttcctggc 60
 attaagctcc ttnttccttt gcaattcggc ctttcttcag nggtcccatg aatgctttct 120
 tctcctccat ggtctggaag cggccatggc caaacttgga ggnggtgtca atgaacttaa 180
 ggtcaatctt ctccanagcc cgccgnttcg tctgcaccag caaggacttg cggaggggtga 240
 gcacccgctt cttgggtccc accacacagc ctttcagcat gacaaagtca ttggtcactt 300
 caccatagn gacaaagcca cccanagggt tgatgctctt gtcanatagg tcatagtcag 360
 tggaggcatt gttcttgatc agcttgccgt ccttgataag gtagccctgg ccaatcttat 420
 aaatcttctt gttgatctca gtgcggtgat ggtagccttt ctgcccagcg cgtgccacag 480
 agaaggctac acgagcagga tgccatgccc caatacaggc caccttgccg aggcctcgg 540
 gggctcttgc gggcagcttc ttggtgtgcc aacgactggt gacccctttg tagcctttgc 600
 ccttggtcac cccgatgacg tcgatcatct catcctgccc aaacac 646

<210> 474
 <211> 544
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(544)
 <223> n = A,T,C or G

<400> 474
 gaattcgaac cccttcggca gcacactccc antcggccgc agcctgacac gccgcgcggc 60

```

ccccagtct cccgcggctg ctcccccagg catggcacag ggccctcgct cactatggca 120
gcagcacggc acagcacgct cgacttcatg ctcggcgcca aagctgatgg tgagaccatt 180
ctaaaaggcc tccagtccat ttccaggag caggggatgg cggagtcggt gcacacctgg 240
caggaccatg gctatttagc aacctacaca aacaagaacg gcagctttgc caatttgaga 300
atttaccac atggattggt gttgctggac cttcagagtt atgatggtga tgcgcaaggc 360
aaagaagaga tgcacagtat tttgaacaaa gttagggaaa gaatgaaaga attgagtcag 420
gacaagtact gggcgggtga aacgattacc acccatagtg cgaggaggag ccatcgacag 480
atactggccc accgncgacg ggcgccttgg ttgaatatga catagaatga agtgggtata 540
gacg

```

<210> 475

<211> 578

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(578)

<223> n = A,T,C or G

<400> 475

```

gaattcgaac cccttcggga gaaccccatg ngggaacttc gcatccgcaa actctgtctc 60
aacatctgtg ttggggagag tggagacaga ctgacgcgag cagccaagggt gttggagcag 120
ctcacagggc agaccctgt gttttccaaa gctagatata ctgtcagatc ctttggcatc 180
cggagaaatg aaaagattgc tgtccactgc acagttcgag gggccaaggc agaagaaatc 240
ttggagaagg gtctaaagggt gcgggagtat gagttaagaa aaaacaactt ctcatatact 300
ggaaaactttg gttttgggat ccaggaacac atcgatctgg gtatcaaata tgaccaagc 360
attggtatct acggcctgga cttctatgtg gtgctgggta ggccagggtt cagcatcgca 420
gacaagaagc gcaggacagg ctgcattggg gccaaacaca gaatcagcaa agaggaggcc 480
atgcgctggt tccagcagaa gtatgatggg atcatccttc ctggcaaata aattcccgtt 540
tctatccaaa agagcaataa aaagttttca gtgaaaaa

```

578

<210> 476

<211> 619

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(619)

<223> n = A,T,C or G

<400> 476

```

ggaattcgaa ccccttcgct cctgcctgtc cgccatgttt tcaggncggg nctggcttgg 60
tcttcccccg taaggaaatg gccggggage tccaggggac ccaggcgccg tcgcttcggc 120
ggagcctggg ctgaccagcc aggacagcgg ggtaaaccgg aacaattctg cgcgaggtag 180
ggaggccatg gcgtccggca gtaactggct ctccggggtg aatgtcgtgc tggatgatggc 240
ctacgggagc ctggtgtttg tactgtatct tatttttgtg aagaggcaaa tcatgcgctt 300
tgcaatgaaa tctcgaaggg gacctcatgt ccctgtggga cacaatgcc ccaaggactt 360
gaaagaggag attgatattc gactctccag ggttcaggat atcaagtatg agccccagct 420
ccttgcagat gatgatgcta gactactaca actggaaacc cagggaaatc aaagtgtgcta 480
caactatctg tataggatga aagctctgga tgccattcgt acctctgaga tcccatttca 540
ttctgaaggc cggcatcccc gttccttaat gggcaagaat tttccgcttc taccttgctg 600
gatcttgcga aacactagt

```

619

<210> 477
 <211> 674
 <212> DNA
 <213> Homo sapiens

<400> 477
 gaattcgaac cccttcgggg tggttcgactg ctagagccga gcgaagcgat gcctaaatca 60
 aaggaacttg tttcttcaag ctcttctggc agtgattctg acagtgaggt tgacaaaaag 120
 ttaaagagga aaaagcaagt tgctccagaa aaacctgtaa agaaacaaaa gacaggtgag 180
 acttcgagag ccctgtcatc ttctaaacag agcagcagca gcagagatga taacatgttt 240
 cagattggga aaatgaggta cgtagtggtt cgcgatttta aaggcaaagt gctaattgat 300
 attagagaat attggatgga tcctgaaggt gaaatgaaac caggaagaaa aggtatttct 360
 ttaaatccag aacaatggag ccagctgaag gaacagattt ctgacattga tgatgcagta 420
 agaaaactgt aaaattcgag ccatataaat aaaacctgtg ctgttctagt tgttttaatc 480
 tgtcttttta cattggcctt tgttttctaa atgttctcca agctattgta tgtttggatt 540
 gcagaagaat ttgtaagatg aatacttttt tttaatgtgc attattaaaa atattgagtg 600
 aagctaattg tcaactttat taaggattac tttgtctgcc caccctagt gtataataaa 660
 atcaagtaat acat 674

<210> 478
 <211> 663
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(663)
 <223> n = A,T,C or G

<400> 478
 tttttttaag ctttcacaat ttttattaaa tcctagtcta nttgaacaat atctgatgtt 60
 acagacatca tcccatgggtg aacatgttta ataagtgaag gcaagtcaga catctcatct 120
 aagtcattat tttctgcaga ctaagcaata actacacaga acactatggg taaacaaaca 180
 cctgctcagt tttcacacaa gccatgttgt ttatcaaatt agatctgcta atattgaata 240
 cagtagattc ggtgattgta gttctcatat aagtatctta ttgagataac attttgacag 300
 tttcactgac tttccaaata agcataccat aatcaaagaa aagaataaag agtgaagtaa 360
 aaactgaaca tgaagagatt aagttattaa aggaaaatga agtaaataaa aagagtgaag 420
 aaccattggg ggtggaagtc aaacaagcct agacatttga ttggaagaga aaagatcaaa 480
 tatgaagttc acaaaccaaa agtttataaa ctcaatgcaa tacaatcct ttttattgta 540
 aaagctgagt tgaaactaaa agatctataa aaactgttac ttttggcctt aaacagtacc 600
 aactcttatg atcaaaaaag gccacacagt taagattgna ttacttgatt ttattttaca 660
 cta 663

<210> 479
 <211> 673
 <212> DNA
 <213> Homo sapiens

<400> 479
 gaattcgaac cccttcgaat gaagaactct ccagggatct agtgaataaa ctaaaaccct 60
 acatgagctt cctgactcag tgccgtcccc tgtcagcgag catgcacaac gccatcaagt 120
 tccttaacaa ggaaatcacc agtgtgggca gttccaagcg ggaagaggag gccaaagtcag 180
 aacttcgagc agccattgat cggatatgtgc aagagaagat tgtgctagca gctcaggcaa 240

```

tttcacgctt tgcttaccag aagatcagta atggagatgt gatcctggta tatggatgct 300
catctctggt atcacgaatt cttcaggagg cttggacaga gggccggcgg ttccgggtgg 360
tagtggtgga cagccggcca tggctggaag gaaggcacac actacgttct ctagtccatg 420
ctggtgtccc agcctcctac ctgctgattc ctgcagcctc ctatgtgctc ccagagggtt 480
ccaagggtgct attgggagct catgcactct tggccaacgg gtctgtgatg tcacgggtag 540
ggacagcaca gtttagccctg gtggctcgag ccataaatgt accagtgtgt gtttctgtgt 600
aaacatacaa gttctgtgag cgtgtgcaga ctgatgcctt ttgtctctaa tgagctagat 660
gaccctgatg atc 673

```

```

<210> 480
<211> 203
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(203)
<223> n = A,T,C or G

```

```

<400> 480
gaattcgaac cccttcgggg ggaggaagag gaggtggagg aggaggggtga tgttgatagt 60
gatgaagaag aggangaaga tgangananc tcctcggagg gcttggaggc tgaggactgg 120
gcccagggag tagtggaggc cgntggcagc ttcggggcct atgggtgccca ggaggaagcc 180
cantgcctta ctctgcattt cct 203

```

```

<210> 481
<211> 482
<212> DNA
<213> Homo sapiens

```

```

<400> 481
ccagacgctg cccatggagg cgtccagcga gccgccgctg gatgctaagt ccgatgtcac 60
caaccagctt gtagattttc agtggaaact ggggatggct gtgagctcag acattgcag 120
atctcttaag tatccttaag ttgcagtgat gctaaaagtg gcagatcatt caggccaagt 180
aaagaccaag tgctttgaaa tgacgattcc acagtttcag aatttctaca gacagttcaa 240
ggaaattgct gcagttattg aaacgggtgtg aagacggatt ctttggttga taaattgcta 300
tcattctaaa gtcattggact tcactttcgg caacaaaact aaataaggat ggaacattta 360
ttgaatgaaa aatgcacttt tgtttttcca tttttttaaa taataaaaaat cagacaaaca 420
gaaaaaaaaa aaaaaaaggg cggccgctcg agtctagagg gcccgtttaa acccgctgat 480
ca 482

```

```

<210> 482
<211> 505
<212> DNA
<213> Homo sapiens

```

```

<400> 482
aaaatcttta gctgccaaaga aagaagttaa gactctcagt gctgagagag actgaatcca 60
cctaggtgat aaggtgactg gaccagtaaa accctttgtg tgctgggggg ttttatgcct 120
tgtagaacc cagtgtgagca agatttgggt accctacata cattcagtag ccaggaaagg 180
gtgattggat tgccagactc tgccctgctgg caaaaggatg agctgtagaa gctgaagtcc 240
taggtagtag atataaagaa gacaaattag gtggcacctt ctagactgtg caatgcattg 300
atttgggaatt gaatttttcc tctaattatt ctagggaac cctgggctaa gaaaccaatg 360
taaaacctga tgaggtagtc tgtagtcaca ctgggtagag gtagaggcaa ccacaaaatt 420

```

attcttaaga atgcctccca ggcgcctgga agatgaaact ttctggtgaa tatgagctca 480
 tggtaaaaat ttaggtcgga tgcag 505

<210> 483
 <211> 501
 <212> DNA
 <213> Homo sapiens

<400> 483
 tgcaaaaagg taacaaattc ataactggaa agcaaagaga agaacaagta tgatttggat 60
 gataaagcat tgttttaatg gtgaaaactt cacagatcac taatgtttct agaggttaac 120
 ttcaagtggg caagctgggg tttttaggta gtcagtggcc tagttcctaa agccacagta 180
 taggatctgt taaactgaat gtctgttgaa agtttgtttt agctgcttgg aggcttcctt 240
 ttaagacaaa ctgtatgtga ttaagttgtt ttgagggaac tgaagaacct gatgtagccc 300
 ctggccagat aactgcctga tttctcagat attattttctc tgggaaacat tctacatagc 360
 acaggagctt aagagtggca ttatcttctc gccttaattt ccagagatta tttctgtact 420
 gagaatcctg gaactactat gctaggaaat ttaaagctgc atggtctgtc ttgttttcat 480
 ttaattattg tgaataccta g 501

<210> 484
 <211> 501
 <212> DNA
 <213> Homo sapiens

<400> 484
 gcactaagac caccttctat gaggagcagg gtgactacta cagccagtac atccgggcct 60
 gcctggacca cctggccccc gactccaaga gttctgggaa ggggaagaag cagccttctc 120
 ttcatcacac tgctgtcag ctcttggaag aggggtgtctt ggtggaaatt gaagatcttc 180
 ccgcctctca cttcagaaac gtcatctttg acatcacgcc gggagatgag gcaggaaagt 240
 ttgaagtaaa tgccaagttc ctgggtgtgg acatggagcg atttcagctt cactatcagg 300
 atctcctgca gctccagtat gagggtgtgg ctgtcatgaa actcttcaac aaggccaaag 360
 tcaatgtcaa ccttctcctc ttctcctcaca acaagaagtt ttgcggaag tgacagaggc 420
 aaaggggtgt acccaagccc ctcttacctc tctggatgct ttctttaaca ctaactcacc 480
 actgtgcttc cctgcagaca c 501

<210> 485
 <211> 504
 <212> DNA
 <213> Homo sapiens

<400> 485
 cgcactcttg gaacattctt tctttcaaca acccaaggca tgcttctatc tccttttgag 60
 gtttccctct aagtgttacc tctaagatag gcttttctct gacactctat gatggaacct 120
 ctaggatttt ctctattgtt ttatgottat tttgatattt gattcctaga attttaaata 180
 cattatata catataaaat aaacctttta atattgaaat gaaaagataa aaatacatat 240
 actaagtga taggtcaaaa gtgtgagatc atcttgaaca ttatcttgaa gagaagatac 300
 caatttacct tctgtcaga tcatgggtga cgatatcaca acctgcctag aataactctc 360
 cttttctgaa ccattttatt actacttttg tcttccaatt aaatattagc ctgacttcaa 420
 atatcataca ttagtttctt ttgtttatgt aattgaatta tataacatat attcattaga 480
 gcctatTTTT tttaaaattt ttgt 504

<210> 486
 <211> 501
 <212> DNA

<213> Homo sapiens

<400> 486

```
gagaggtcac tatggcgctt ttctgcagga cgagtgggac ctgctccaaa gaatgatttt 60
gctggcccac gagaaactct ctgttcctgt cacgtgcaaa atccgtgtct tcccggagat 120
tgacaagacc gtgaggtacg cccagatgct ggagaaggcc ggctgccagt tgctgacggt 180
gcacggacgc accaaggagc agaaggggcc cctgtcgggt gcagcgtcct gggagcatat 240
caaggctgtg cggaaggctg tggccatccc tgtgtttgct aacgggaaca tccagtgcct 300
gcaggacgtg gacgctgccc tccgggacac ggggtgtgag ggcgtcatga gcgcagaggg 360
caacctgcac aaccccgccc tggtcgaggg ccggagccct gccgtgtggg agctggccga 420
ggagtatctg gacatcgtgc gggagcacc ctgccccctg tcctacgtcc gggccacct 480
cttcaagctg tggcaccaca c                                     501
```

<210> 487

<211> 501

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(501)

<223> n = A,T,C or G

<400> 487

```
accattatatt agcagcaaaa aggaaagttt gaagacatta acaggaactg gttaattgta 60
gtccttatctt gaaaaggaca gattgaatgc agccaaatta tggcaaagaa atcagtagga 120
caacccctat aaagggtagt tcttttaaaa aaaatttctt tattggcaac aacataaaaag 180
atatgaaaga atcactcata atttatcagc ataacatagc tattctcatt tttgcaattg 240
acttttttagt tcttgaccaa atgtaatttt tattagttgt gattaactga ttttgtgctt 300
tttttaaaaa aaaaaaaaaa ctagaataag acatttgttt tgtaattat tataaatgac 360
tgtattcatt ctgtttatgt accataattt tggatgttcc tacgatgtta aacttttagg 420
ttgtttttaa ttgtttgttc ttatagacaa ctctgtaagg gnttttaact gcttttatca 480
ggagaatgtc aaagaagtcc t                                     501
```

<210> 488

<211> 148

<212> DNA

<213> Homo sapiens

<400> 488

```
attctaagga tgaaatggct acagagcaaa ctgcagctga gagaaaactg cttggagttt 60
ggacagaggt ggaattgagt gtccacaggc cagctgagga ggtggtaccc agcactctat 120
gaacccttcg ctcaagtcag cctggagt                                     148
```

<210> 489

<211> 501

<212> DNA

<213> Homo sapiens

<400> 489

```
gctgtggatt cccctccaag tggaggagga tgggcaggct ggggatcctg gggcaaattc 60
ctgctgtcgt cagcatctgc cacagtaggt catggattga cggcagtcaa ggaaaaagca 120
ggagccactc tacggattca tgggtgtaaat tctggatctt ctgaaggagc ccaaccaaatt 180
actgaaaacg gagtccctga aataacagat gcagccacag atcagggccc tgcagaaagc 240
```

```

ccaccactt ccccttcac agcctctcgg ggtatgctgt ctgccatcac caatgtgggt 300
caaaacacag gtaaaagtgt cttaactgga ggccttgatg cgttggaatt catcggaag 360
aaaaccatga atgtccttgc agaaagtgac ccgggcttta agcggaccaaa gacgctcatg 420
gagagaactg tttccttgtc tcagatgtta aggggaagcta aggagaagga gaagcagaga 480
ctggcacagc agctcacgat g                                     501

```

```

<210> 490
<211> 482
<212> DNA
<213> Homo sapiens

```

```

<400> 490
attgcaaact gaaagtggac aaagaacttaa ggtaaacctg ctccatcatgg tggaaatgott 60
ccaaatgctg gaaggaggac tttagggcag agttcactaa ggaggcttgt gcttatagat 120
cagtgggcct gaaagaagtt tctctaggtt ctgggttgtgt gctgtacgag gtgtaggtag 180
taataatact cttgtcagcc acagtgaagc cccaagctag ccgggatagg ggactgacct 240
tgtacaggca gcatggagaa actaagacag agtgtcctgc ccaagtgatg gcaactggga 300
gcagtcactc aggtttatct ccaccagggc ccaagaaaaa aagaaatgag gcaacctaaa 360
attccatcaa gatagatacc aatatccaag gtgcttggtc tttagcgggtg gggacccacg 420
ttaaggtctt tgggtgggaag gtgggaggtg ttttcagcat gagatagggg tcaggctgtg 480
aa                                     482

```

```

<210> 491
<211> 483
<212> DNA
<213> Homo sapiens

```

```

<400> 491
cgctctctcc cgtgatccct ctctcgttaa ccgtaggcgc ttttcgtgaa ggcccgggtt 60
tttacagcac ttctgttttc taaccacgaa cagtgtctgt tcgttcgcag ggccagcaag 120
gagagccccc ccccccgcgc ccgcccgcgc ccgcccgcgc gccgcctttg gatcccgcgc 180
actccgcccc gcccggcctc ccagggcatg gcgcgcgtgc gcttctccgc caatctgtcc 240
tggctattcc ccgagctccc cggcctccc gcgcgggtgc ggcccgccgg cagctcgggc 300
ttcagaggcc tccaggtggc ctggccgtac gcggagacgc ctgaggcgtt ggccgcgcgc 360
gcgcgagaag cggggctgcg gcttgtactg atcaacacgc ccccgggaga ccaagagaag 420
ggggaaatgg ggctgggggc cgtccccggg agacaggcgc ccttcggaga gggactggag 480
cag                                     483

```

```

<210> 492
<211> 266
<212> DNA
<213> Homo sapiens

```

```

<400> 492
acctcatctg ctttgctttg gcatgtgagc cttgcctaag ggggcatatc tgggtcccta 60
gaaggcccta gatgtggggc ttctagatta cccctcctc ctgccatacc cgcacatgac 120
aatggaccaaa atgtgccaca cgctcgctct tttttacacc cagtgcctct gactctgtcc 180
ccatgggctg gtctccaaag ctctttccat tgcccaggga gggaagggtc tgagcaataa 240
agtttcttag atcaatcaaa aaaaaa                                     266

```

```

<210> 493
<211> 483
<212> DNA
<213> Homo sapiens

```

<400> 493

```

gccgctcgcg ctaggagagc gggcttcggg cacttgacat ggcggcagtg gcggcgactg 60
cagcagcgaa ggggaatggg ggcggcggtg gcagggccgg ggcgggggac gccagcgcca 120
cgcggaagaa gaagggcccg gggcccctgg ccacggcgta cctggtcac tacaatgtgg 180
tgatgacagc cggttggtg gttatagcgg ttggtctggt ccgagcatac ctggctaagg 240
gtagctacca tagcctttat tattcaattg aaaagccttt gaaattcttt caaactggag 300
ccttattgga gatcttcat tgtgctatag gaattgttcc atcttctggt gtcttgactt 360
ctttccaggt gatgtcaaga gtttttctaa tatgggcagt aacacatagc gtcaaagagg 420
tacagagtga agacagtgtc ctctgtttg ttattgcatg gacgatcacg gaaatcatcc 480
gtt
483

```

<210> 494

<211> 301

<212> DNA

<213> Homo sapiens

<400> 494

```

gtggctatatt tcatggaata tcttttatca gcctttcagt tttaatattt ttgtgtcttt 60
ggatctaaag tcagtttggt ttggacaatg tgtagtttga tcatgatttt aaaaaatcta 120
ttctgaagct ggggtggttca cacctgtaat ccagcactt tgggaggatc tcttgagccc 180
aggagtggga gactagcctg gtctacaaag tgagactctg tttctacaaa aaaataaaat 240
aaatagttgg gtgtggtggt atgcgcttgt ggttccagct acttgggagg atgagggagg 300
a
301

```

<210> 495

<211> 496

<212> DNA

<213> Homo sapiens

<400> 495

```

cgaagtgaag gctagggggc cgtacgcgcc cgcctgactg tcgccagcag ctctcggcg 60
gccccaccgc agccgcgcgt ccctgaggcg cgggaggccc gcgccccgcg gctcgctgtg 120
cgtgggaggg cgcgagcgaa cgcgggcgag gacggccga gccgctgaag aggagctggg 180
cgccggccgc ccggccgcgc tcggcccgcg gatcgctcc gcccggtctt cgccggcccc 240
ggcccctggc gagatgccgt gtggggagga ttggtcagc caccgcgtgg gaatcgtgca 300
gggattcttc gcccaaatg gagttaatcc tgactgggag aagaaagtaa ttgagtattt 360
taaggaaaag ctgaaggaaa ataatgctcc taagtgggta ccatcactga acgaagtcc 420
ccttcattat ttgaaaccta atagttttgt gaaatttcgt tgcattgattc aggatatgtt 480
tgaccctgag ttttac
496

```

<210> 496

<211> 494

<212> DNA

<213> Homo sapiens

<400> 496

```

aaactatata aaaagtgatt tgtacagaac tttatttttag ctctttttta aaaatgattt 60
gcatggttag aaaacggcga ggacagccag gggagggaag ggcctctagg gaactttgca 120
ctttctatac ctttgacta tgcactgcc tattgattct acaccaata atgatattac 180
ttgaaccat ctgtaagaaa ctgcttcgga aattcatttg tgtgtatgta aataacacaa 240
catagaaaca ggaaggga aaagtctgca gtaatgcaag ttttttttt ctttctgtt 300
tattttcggt tttgcttta gtcttttat ttttaattcc ctttttggtt ttctttttgg 360
gttttggttc cttttgggtt tatgggtgcc ctgatactcc agcagagatc agaaggctac 420

```

agatccattc tatccatccg ttatgtggct ttgccatccc agcttggagt gtctttacaa 480
agataataac agtt 494

<210> 497
<211> 184
<212> DNA
<213> Homo sapiens

<400> 497
gcgcgccgcg gctggcaggg tgtgctgag tttgggtggcg gccggctgtg cagagacgcc 60
atgtaccggc tcctgtcagc agtgactgcc cgggctgccg cccccggggg cttggcctca 120
agctgcgggc gacgcggggg ccatcagcgc gccgggctgc cgcctctcgg ccacggctgg 180
gtcg 184

<210> 498
<211> 471
<212> DNA
<213> Homo sapiens

<400> 498
tcttactaca aatggagatg gctattatga aacagcatga gcatgagcct tttatctttt 60
atacttagtg atatactttg cttgaaaatc actcagcaaa gtagttcaca tgatgtgtat 120
catatttgaa gtgtggtttt tctcaaaatc attgacttta aggagctcat ttctgaacaa 180
aaagggtttgc tctgtggaaa aatcaatcac tgccaggatt ctttcatttc tgtactatct 240
tgtataattg aatttgttca cttctctcac accagcaagt gttttacagg tgccttggat 300
taaaacaaaa ttgattttta aatttttatg taagtcattg tgtctatgat gccactttta 360
aaaggaaaat gcaattgcgt aatggcttat atccttattt aatgtacctt tttgtgttct 420
aataattggt tgaatgtttt attcagctta aaactttacc atgaagtcatt a 471

<210> 499
<211> 478
<212> DNA
<213> Homo sapiens

<400> 499
agggtgggaaa agcggaggag gacgcccagg aggaggcggc ggcgggcgcc gggaagtga 60
aggctctgca aagttcagcg gcggtgcgg ggcgcgagcc ccgggctagc ggcagacgag 120
ccgcagggc cgtccgcgg ggcagcgcag ccaggccggc tatggtcccg gggctccgc 180
cgccccccag gtgcccggga cccgccaggc cgggtgcgca gggtcacccc acctcccg 240
gcgggtcccg cccctggctc ccagctgccg gcgaccgctg accgagcccg gcgccccagg 300
aggaggaaga aaccagggcc ccgttcctc ccgaggacgg cggcgcttca tccgcagcc 360
cagaggtctc ggctccctcc ggcaccgcgc cggcccggt gctcccggt cctcccgcc 420
atggggagct gcgcgcggct gctgctgctc tggggctgca cgggtggtggc cgcaagga 478

<210> 500
<211> 495
<212> DNA
<213> Homo sapiens

<400> 500
gggggcttct ggcttgggtg ggaccaggag ggggcagaag gcaccctgtc gtggctgggc 60
accgtcttcg gcgtgctggc tagcctctgt gtctcgtcga acgccatcta caccacgaag 120
gtgctcccg cgggtggacgg cagcatctgg cgctgactt tctacaacaa cgtcaacgcc 180
tgcgtcctct tcttgcccct gctcctgctc ctgggggagc ttcaggccct gcgtgacttt 240

```

gccagctgg gcagtgccta cttctggggg atgatgacgc tgggcggcct gtttggtttt 300
gcatcggtt acgtgacagg actgcagatc aagttcacca gtccgctgac ccacaatgtg 360
tcgggcacgg ccaaggcctg tgcccagaca gtgctggcgg tgctctacta cgaggagacc 420
aagagcttcc tctggtggac gagcaacatg atggtgctgg gcggctcctc cgcctacacc 480
tgggtcaggg gctgg                                     495

```

```

<210> 501
<211> 494
<212> DNA
<213> Homo sapiens

```

```

<400> 501
ctgcggtgtg gttggtggtg agatgacgac cttagtgctg gataatggag cttacaacgc 60
caaaatcggt acagccatga aaatgtgtcg gttattccta attgtcagtt ccggtcaaaa 120
acagcacgtc ttaaaacttt tactgccaac cagatagatg aaataaaaaga cccttctgga 180
ctcttttaca tcctcccttt tcaaaaaggc tacttggtga attgggatgt tcagagacaa 240
gtttgggatt accttttttg aaaagaaatg tatcaggttg atttttttaga tactaatatt 300
attatcactg aaccatactt taacttcact tcaattcaag aatcaatgaa tgaaattcta 360
tttgaagaat accagtttca agcagtatta agagtaaag ctggggctct cagtgcacat 420
aggtatttcc gagataatcc ttccgaatta tgctgtatca ttgttgatag tggatattcc 480
tttacacata tagt                                     494

```

```

<210> 502
<211> 479
<212> DNA
<213> Homo sapiens

```

```

<400> 502
ttgtataatg ctgaatgtgt ccagagggac aagtttgcag aacctcatat tggatatatta 60
aagaaataat aaaataaaaa agcacttttag gttattttat ctttaacccg attgctgcaa 120
tttcttttgt gtgtatatat acatatatat actttccaca aagttttatt ttttgctcag 180
aataaaaagt taaattgagg tgtgaaaaga aaagcactta ccttggtgca atagtgttag 240
cttgatggtc gttgtcccat gtggccctgg cctggcagcg tttttccgct caatcagccc 300
tgtgctgtga gattgtccat agggaaaacac tattatgcat tctcagcaac cgctcaatct 360
atgcaagcct tccctgtgtg cccagggcg cccctcagg ctctctgaag aactgctgtg 420
ggtcctgttt tctgctgact gttgaggccc tttttcatca cttcttggtc tctcgccat 479

```

```

<210> 503
<211> 451
<212> DNA
<213> Homo sapiens

```

```

<400> 503
ttgtgggccc ggtgggtttc ctaatctggt ttcgtctgcc tggttcatct gtgtgogatg 60
gctccggact cggatccctt ccctgaaggg ccgctcttaa agctgctacc cttagacgct 120
agagaccggg gcacccagcg ctgcccctg ggcccggcgg cctccacgc cctgggcgcg 180
cgcttgggct cggcagtgaa gatctcgcta cccgacggcg gctcctgct ctgcaactgcc 240
tggcctcgcc gggacggagc ggacggcttt gtgcagctgg acccgctgtg cgcgagcccc 300
ggggcggcgg tcggggcgtc gagatcccgg aggagtctca gcctgaatcg cctcctcta 360
gtgccctgtc cgccctcgcg gcgcgtcgcc gtgtggccgg tgttgcgaga gcgggcaggc 420
gcgcccgggt cccggaatac agccgcgggt c                                     451

```

```

<210> 504
<211> 462

```


<212> DNA

<213> Homo sapiens

<400> 504

```

cagtgggggaa ggggagagat gccgaggtgg tcagtatcct gaatttcaga ggcctttttt 60
tgtttgTTTT aatttttgct agattgatat taaaaactca tgtggaggaa ctcaaggaat 120
gtttagaaga ccaaaagtcc ccaatgacag gaacaaaagc aaccaatttt taactttctc 180
ttctcattcc tgttttcatt gatttcccac atgtagtctt tttgctcagg aagtctttgg 240
ggaaattaag gatctttgaa gctctgaaat aggtgatcag gttagtgggt tctgtcagct 300
gtctaagagg ttggaaaatg aactactcaa gatagtcacg aaaatactga aagtttgatt 360
tttctttcca tatttgaatt aattttttct gtttgactgg aaggggtttt tgtataacta 420
aaacctcagc gcataaagga gatttaaaag gaggcacatga tt 462

```

<210> 505

<211> 136

<212> DNA

<213> Homo sapiens

<400> 505

```

tcgattatat cacacatttc agttgggagg ttgtctcaac ctgtgaccac catctgagtt 60
agctggcaga cttctaggag gtcctgtctg aggtagaatc agaaatgggt tccctccttc 120
tcccataaaa aaaaaa 136

```

<210> 506

<211> 466

<212> DNA

<213> Homo sapiens

<400> 506

```

ggggtacaga gacagcagcc tgcggagcgt tctaggcagg acagggcagc aaacctgaca 60
tgcggagctg ggggcagggg taatggggcc agggggtaat ggcaggtagg gccatggcct 120
agagggttgc catgcttggt gcaggggagg agaggcccag gtgtggctgc agtggcagca 180
ggagtcagtg tggtgtgccc cagtgggatg ttgtcagaga atggacctgg ctgctgggaa 240
aggtgattgt gtttgtctga gccacactgg actcttctct gaccagcaag cacattctgg 300
agatgcgggg cagagacgag gcctccgtga gaacctttga ggtgtgaggg ccttgatctg 360
gggtgcagcc tccagctttc tgcttacaga gcaggacctg caggagctcg ctgactgcct 420
gcacagtgga aggaagacct gtttctttta ctttccttga ggagaa 466

```

<210> 507

<211> 101

<212> DNA

<213> Homo sapiens

<400> 507

```

atgatttaat tttttaaaact gtagcaattg gatagataat tttatttgaa attttacaca 60
ctgaaagctc taaataaaca gatacattca cattcaaaaa a 101

```

<210> 508

<211> 242

<212> DNA

<213> Homo sapiens

<400> 508

```

gacaatgcaa gtaacctcaa atgagagtgt ggaaaggcgg gaaagcagcc agagcttcat 60

```

```

tgttatgaaa aaagagtgaa atgtgctctg ttgaagagtt gaagaatgaa caaaggatat 120
ttagtttgaa tggaagctca gtaatgagaa atgagaatgg ttgagttctt aaaagaagca 180
agtaaagaag aggatttgtg ggctactatt ctcattcagt gaatctcatw ccacccttgc 240
ct 242

```

```

<210> 509
<211> 101
<212> DNA
<213> Homo sapiens

```

```

<400> 509
cctttgctcc ctttttccaa tttcttattg catatctttc tgtattacaa caaatgata 60
tgcaataaga aattggaaaa agggagcaaa ggcgaagggg y 101

```

```

<210> 510
<211> 461
<212> DNA
<213> Homo sapiens

```

```

<400> 510
gcagggttcgg gaccatgagt tggattcctt ttaagattgg gcagcccaag aaacagattg 60
tgcccaaaac agtggagaga gactttgaaa gggagtatgg aaaacttcag caccatgtca 120
aaatctgccg tgaagatata cttggactta ctctccaatc ccctctgtga gcaagaccag 180
gaccttctga acatggtgac ggccctggac acggccatga agcggatgga tgccttcaat 240
caggaaaagg tgaaccagat ccagaagact gtgatcgagc ccttaaaaaa gttcggcagt 300
gtcttcccga gcctcaacat ggctgtgaag aggcgggaac aggccttgca ggactacagg 360
aggctgcagg ccaaggtgga gaagtatgag gaaaaggaga agacggggcc agtgctggcc 420
aagctccacc aggcacgaga ggagctgcgg cctgtgcggg a 461

```

```

<210> 511
<211> 461
<212> DNA
<213> Homo sapiens

```

```

<400> 511
ggctttctga tattttctaaa attgacctgg aatcaaccat tgacatgtcc tgtgctaaat 60
atgaattcac tgatgccctg ctgtgccatg atgatgagct ggaagggcgc cggattgcct 120
tcacctctga cctggttcct ccctgggaca ggagcatggg tggtaacctg gacctgtaca 180
gcattgatga acactttcag ccgaagcaga ttgtcaagtc tottatccct tcgtggaaca 240
aactggtttt ctttgaagta tctcctgtgt cctttcacca ggtgtctgaa gtgctgtctg 300
aagaaaagtc acgtttgtct ataagtggct ggtttcatgg tccatcattg actcggcctc 360
ccaactactt tgaaccccc atacctcgga gccctcacat cccacaagat catgagattt 420
tgtatgattg gatcaaccct acttatctgg acatggatta c 461

```

```

<210> 512
<211> 686
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature

```

<222> (1)...(686)

<223> n = A,T,C or G

<400> 512

```
actgacctga aggagaccta agagtccttt ccctttttga gtttgaatca tagccttgat 60
gtgggtctctt gttttatgtc cttgttccta atgtaaaaagt gcttaactgc ttcttggttg 120
tattgggtag cattgggata agattttaac tgggtattct tgaattgctt ttacaataaa 180
ccaattttat aatcttttaa tttatcaact ttttacattt gtgttatatt cagtcagggc 240
ttcttagatc tacttatggt tgatggagca cattgatttg gagtttcaga tcttccaaag 300
cactatttgt tgtaataact tttctaaatg tagtgccttt aaaggaaaaa tgaacacagg 360
gaagtgactt tgctacaaat aatgttgctg tgtaagtat tcatattaaa tacatgcctt 420
ctatatggaa catggcagaa agactgaaaa ataacagtaa ttaatttgtt aattcagaat 480
tcataccaat cagtgttgaa actcaaacat tgcaaaagtg ggtggcaata ttcagtgcct 540
aacacttttc tagcgttggg acctcgccgc gaccacgctg gaattccgga agggcctgtc 600
ctangatcca gtgtggtgga attctgcaga tatccagcac agtggcggnc gctcgagctt 660
aaanggcccg ttttaacccgc tgatca 686
```

<210> 513

<211> 429

<212> DNA

<213> Homo sapiens

<400> 513

```
catgaacgac accgtaacta tccgcactag aaagttcatg accaaccgac tacttcagag 60
gaaacaaatg gtcattgatg tccttcaccc cggaaggcgc acagtgccta agacagaaat 120
tcgggaaaaa ctagccaaaa tgtacaagac cacaccgatg gtcactcttg tatttggtatt 180
cagaactcat tttggtggtg gcaagacaac tggctttggc atgatttatg attccctgga 240
ttatgcaaag aaaaatgaac ccaaaccatg acttgcaaga catggcctgt atgagaagaa 300
aaagacctca agaaagcaac gaaaggaaag caagaacaga atgaagaaag tcaggggggac 360
tgcaaaggcc aatgttggtg ctggcaaaaa gccgaaggag taaagggtgt gcaatgatgt 420
tagctgtgg 429
```

<210> 514

<211> 346

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(346)

<223> n = A,T,C or G

<400> 514

```
aaaactttct ctacttattt agttttntcc tctgagttca accgctgctg gattcgtttg 60
gcataacttt gtgccatgga gttaatgata gataggatga agtaacacac catgacaacg 120
accaactttt caaacatcca ggacaaccag ttttctccct gtgggtgtgcc catttcgctt 180
ttgtggtgaa gcttctgccg ttgagcctcc aggtactcct gaaatggctt ctgcagagat 240
ggacctatgc cggggacagc actggaagca gggtagagta gcccaaagaa aaagacacat 300
ttgggaagaa aagcaggaaa aacgttaaaag aaaatgtact taccac 346
```

<210> 515

<211> 549

<212> DNA

<213> Homo sapiens

<400> 515

```

ctgaccagga ctgtgaagat gcggttccgc tgcgaagatg gggagacatt ttccaggaac 60
gtcatgatga tccagtcctg caaatgcaac tacaactgcc cgcatgccaa tgaagcagcg 120
tttcccttct acaggctgtt caatgacatt cacaaattta gggactaaat gctacctggg 180
tttccagggc acacctagac aaacaaggga gaagagtgtc agaatacagaa tcatggagaa 240
aatgggcggg ggtggtgtgg gtgatggaac tcattgtaga aaggaagcct tgctcattct 300
tgaggagcat taaggatatt cgaaactgcc aagggtgctg gtgcggatgg aactaatgc 360
agccacgatt ggagaatact ttgcttcata gtattggagc acatgttact gcttcatttt 420
ggagcttgtg gagttgatga ctttctgttt tctgtttgta aattatttgc taagcatatt 480
ttctctaggc ttttttcctt ttgggggttct acagtcgtaa aagagataat aagattagtt 540
ggacagttt 549

```

<210> 516

<211> 382

<212> DNA

<213> Homo sapiens

<400> 516

```

ccgctcgtca gactccagca gccaaagatg tgaagcagat cgagagcaag actgcttttc 60
aggaagcctt ggacgctgca ggtgataaac ttgtagtagt tgacttctca gccacgtggg 120
gtgggccttg caaaatgatc aagcctttct ttcattccct ctctgaaaag tattccaacg 180
tgatactcct tgaagtagat gtggatgact gtcaggatgt tgacctagag tgtgaagtca 240
aatgcatgcc aacattccag ttttttaaga agggacaaaa ggtgggtgaa ttttctggag 300
ccaataagga aaagcttgaa gccaccatta atgaattagt ctaatcatgt tttctgaaaa 360
tataaccagc cattggctat tt 382

```

<210> 517

<211> 323

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(323)

<223> n = A,T,C or G

<400> 517

```

acgagcgtag gacgatgctt ctcttntgtc agcctgcaac tgagtcagga ttgaatactt 60
ggaccccagg tctggagatt gggatactgt aatgcttctt tgttattata acataaaagc 120
accactgttc tgttcatttc ctagctgttc taattaagaa aactattaag atgagcaacc 180
acatttagaa atgtttattg acaggtcttt tcaaataatg cttttctaata taatagccaa 240
agatttcata tctaactttg taaccagaat tatacagtaa gttgacacca cttagattta 300
aaggcagaca gttttgcttt agt 323

```

<210> 518

<211> 605

<212> DNA

<213> Homo sapiens

<400> 518

```

ctggataccg aggctggggc cccacactgt ggaacaaacc cacagcttgc tcaggatcca 60
tcccagaatc agcagacatc aaatocaaac cacagttcag aagatgtgaa gccaaaaacc 120
ctcccgtgg ataaaagcat taaccatcag atcagagtctc ccagtgaaag gcggaagtct 180

```

```

ataagtggaa agaagctgtg ctcttcctgt gggcttcctt tgggttaaagg agctgcaatg 240
atcatcgaga ccctcaatct ctattttcac atccagtgtt tcaggtgtgg aatttgtaaa 300
ggccagcttg gagatgcagt gagtgggacg gatgttagga ttcgaaatgg tctcctgaac 360
tgtaatgatt gctacatgcg atccagaagt gccgggcagc ctacaacatt gtgacacggc 420
tttcaagctt ccggatcact caccatttct ttactgagag tgtcccctgg caactgctta 480
acaaaatccc aagctcaggg gcttctcagc atttacctaa tttctgaaag gctcttctga 540
aaggtggtat ctgttctttc gtagcacagt gtttatgttt ttctgtttta ttggtttggt 600
ttttt 605

```

```

<210> 519
<211> 462
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(462)
<223> n = A,T,C or G

```

```

<400> 519
ctgctggtca tgncccttggc agtcttttgt gcaaaataag gcatattnga gctccacatt 60
aaccttgagg caggcgncct cttgctctgc atgctgtanc agngcacgtc ctcttccccc 120
ttggtggtgt agcctgngan aggtgcccc tacttatcca cacaccagca naagccccgc 180
ttctgcctt tggaagggcg aactgcttt ttcttataaa atcccttctt gtcacagttg 240
ggaatgtgna caccctggg actcagcaca ttgaggaact tcaagtgatt cagtgtgnct 300
tccatttctc tacggcangn accatattct gtctcccgct tggactcgga ggagaagttc 360
tgggtatctg tgctctgaga ctcgtagtca actttgtagc gctggctgnc tttagcatgc 420
cctttcttga tgatgantat ctttgaatgg agggggtgga ac 462

```

```

<210> 520
<211> 565
<212> DNA
<213> Homo sapiens

```

```

<400> 520
actcgtaata aatatgcac cggaacaag ataaaaggct acacctcgtc aggcaccta 60
caaaaatgtc tcaagtttta tatactctgc agcatttctg tgcgggggca gaaggggctg 120
ttgtgtatth tctgaagtgc tgtgacaaaa ggtcctttca ctttctttg gagcattttt 180
gaaattgctt aactataatt aaacaactta agaaaagtaa caccaagctt taaagccatt 240
tttgctttgc tgtcattggt ccttatccaa tacagatcaa catatcatcc agcacagcca 300
agcaccact gaggccaagc agccttgtgg gacatgggccc ctgtcagagc aggccctact 360
ttcagttaaa tactttggag agtccaggat tctgtctctc tccctcaaca agattaatgc 420
cataagggaa gttgcaagcg tgtagaaac atttttaacc tgaaagtaaa gtgaacagaa 480
atattttttt ttccgagacc tctgctatgc accataatat taccatatca gggtttttag 540
cttcaaagtt gaaaaacaga ttggt 565

```

```

<210> 521
<211> 127
<212> DNA
<213> Homo sapiens

```

```

<400> 521
acatggctga cgtcaccgtc cagtgcacaa tcaaaaaaga aagaaagaaa aacccccaaag 60
aaagaggatt tttcagtgga gaacatggtg ggctgattag gcttctatta gattacattc 120

```

attttcac

127

<210> 522

<211> 642

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(642)

<223> n = A,T,C or G

<400> 522

```

actatgtttc gtaaattaaa taggtntggc ccagaagacc cactcaattg cctttgagat 60
taaaaaaaaaa aaaaaaaaaaag aaagaaaaat gcaagtttct ttcaaaataa agagacattt 120
ttcctagttt caggaatccc ccaaatcact tcctcattgg cttagttaa agccaggaga 180
ctgataaaaag ggctcagggg ttgttcttta attcattaac taaacattct gcttttatta 240
cagttaaatg gttcaagatg taacaactag ttttaaagggt atttgctcat tggctctggct 300
tagagacagg aagacatatg agcaataaaa aaaagattct tttgcattta ccaatttagc 360
aaaaatttat taaaactgaa taaagtgtg ttcttaagt cttgaaagac gtaaaccaaa 420
gtgcacttta tctcatttat cttatggngg aaacacagga acaaattctc taagagactg 480
tgtttcttta gttgagaaga aacttcattg agtagctgtg atatgttcga tactaaggaa 540
aaactaaaca gatcaccttt gacatgcgtt gtagagtggg aataagagag ggctttttat 600
tttttcgttc atacgagtat tgatgaagat gatactaaat gc 642

```

<210> 523

<211> 244

<212> DNA

<213> Homo sapiens

<400> 523

```

ctgaaggagc tgatccagaa ggagctcacc attggctcga agctgcagga tgctgaaatt 60
gcaaggctga tggaagactt ggaccggaac aaggaccagg aggtgaactt ccaggagtat 120
gtcaccttcc tgggggcctt ggctttgatc tacaatgaag ccctcaaggg ctgaaaaataa 180
atagggaaga tggggacacc ctctgggggt cctctctgag tcaaattccag tgggtgggtaa 240
ttgt

```

<210> 524

<211> 407

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(407)

<223> n = A,T,C or G

<400> 524

```

acgttagtgg tgatgtcacc caccctnnng ctggggccga ggatgctctc attgtgcact 60
cgtagatga ctctggccac tggggcagag gtggtttatt tacagctctg gaaaagcgat 120
ccgctgagcc aagaaaaata tatgagctgg ctgggaaaat gaaagacctg agtttgggag 180
gtgtcctttt atttctgtt gatgataaag aatcaagaaa caaagggcaa gatttggttg 240
ccttgattgt ggctcagcat cgtgatcggt ccaatgtcct gtctggcatt aagatggcag 300
ccctagaaga gggcctgaag aagatatatt tagcagcaaa aaagaagaaa gcaagtgttc 360

```

atcttccacg tattggacat gccacgaaag gttttaactg gtatggt

407

<210> 525
 <211> 276
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(276)
 <223> n = A,T,C or G

<400> 525
 acacaggagg caacgtgttt cacatnatag acttcacttc caactccttg gaatgttcat 60
 ttctttggct tacaggagag actagacagg aaggccaggc aatgcttagg caactaaaat 120
 gaggttgggg gtaatgctaa cgtcaccctc acagggatgg ccacggggac tggtattcgc 180
 aagctggttt tctagacctg ttagctggaa gcatggtgag caccatttct ggacgctcag 240
 gccgtgtcgg gcttcagtca tctccaccac acaggt 276

<210> 526
 <211> 288
 <212> DNA
 <213> Homo sapiens

<400> 526
 acaattaccc accactggat ttgactcaga gaggaccccc agaggggtgtc tccatcttcc 60
 ctatttattt tcagcccttg agggcttcat tgtagatcaa agccaaggcc cccaggaagg 120
 tgacatactc ctggaagtgc acctcctggc ccttggtccg gtccaagtct tccatcagcc 180
 ttgcaatttc agcatcctgc agcttcgagc caatggtgag ctccttctgg atcagctcct 240
 tcagctcctt cttgctcagg gtgtgcttgt caccctccct gccggagt 288

<210> 527
 <211> 412
 <212> DNA
 <213> Homo sapiens

<400> 527
 actttgagct tattgttttt attctgtatt aaatatattc agggttttta acactaatca 60
 caaactgaat gacttgactt caaaagcaac aaccttaaag gccgtcattt cattagtatt 120
 cctcattctg catcctggct tgaaaaacag ctctgttgaa tcacagtatc agtattttca 180
 cacgtaagca cattcggacc atttccgtgg tttctcatga gctgtgttca cagacctcag 240
 cagggcatcg catggaccgc aggagggcag attcggacca ctaggcctga aatgacattt 300
 cactaaaagt ctccaaaaca tttctaagac tactaaggcc ttttatgtaa tttctttaaa 360
 tgtgtatttc ttaagaattc aaatttgtaa taaaactatt tgtgtaaaaa aa 412

<210> 528
 <211> 489
 <212> DNA
 <213> Homo sapiens

<400> 528
 aaatgcaaaa agtcaaagta ggtaacaggt tggtaattaa agtgtcagga agactggaag 60
 aggcaaaaat caagcagagt tccaataagt gtatgaaaaa aaaaatcata actgaagggt 120
 taagaaaagt ccccaaaggc agaatcacia tatgagcagg aggaataaaa agcttttggg 180

```
tataaccaggc agctttctgt acgactcagg ttacacagtg aaattcctca gtttgagttc 240
agaagaattt gaacttattc cagcaaaata cttcaatctt tttattactg cctcctcccc 300
catcttcttt ctgggcaaag ggatgcttgg attaggtcca aagctcctgg cagggggagg 360
ggccatgtgt cacagcataa cagacgggtg caagtgcttt actgagcagg ggtcagggtt 420
gcagcaactc tgataggctc acacaatggc ctccatttta cagcccctcc ttggaggccc 480
actgatcag                                     489
```

```
<210> 529
<211> 631
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (1)...(631)
<223> n = A,T,C or G
```

```
<400> 529
actgcctaa agtttttata tctgnntctt ctgctgtaaa tcttccttc ataaatgaaa 60
attttaataa aatcaactat gtggaaatat ataattaaag gaattcacta actgtgattt 120
tcataattta gggacattct cttctagtaa gcatggtgca ttatttacta gagatataat 180
atgcattaaa acaaaaaaatg ttttctatca tcatagaaaa gtttgaggtc cagggataat 240
catctctgga tacattatct cctaccgtcg tggtagacac tgaacacatt tgaggcttat 300
gactggttct tttacttaca aatattgttt agacacattt tcaaattgtc caccaatcaa 360
taataataag gaatggattt tatctatatt gacagttctt tcaaccttaa gagtgaactg 420
ctacaggtaa gattcaatca catttttcag gagaaagcta ttgagaccaa tatgcttttg 480
ttatctaata ggggtggaat gacttataat gctatttact ccaggcaaag agaaaataca 540
acagacatag gatcttgatt tcaacgtagt tctcctccat gtgcatttct ctgtccggtt 600
aggcaatgcc aactggtcca ccagtgaaca t                                     631
```

```
<210> 530
<211> 316
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (1)...(316)
<223> n = A,T,C or G
```

```
<400> 530
acacatttaa atgactcacg agantnaagt ttttttcaaa tatattaaga tcacaccacc 60
ttgttgttta tcgaaagata ttcaaggaga aagatctgac tctccaaact gcatctgaga 120
ttgccacttt aaacagacct catttcaaac atgcaacaac gccactggta ataaagcttt 180
ggaatgggtg ctcatcttat tattttcacta caaacagcat agaaagcaag agaagttggg 240
aattttattct aaaatagaat ggagggtgtc atctacagca gcaactcctca ctcctctgtt 300
gccattttta gcaagt                                     316
```

```
<210> 531
<211> 296
<212> DNA
<213> Homo sapiens
```

```
<220>
```


<221> misc_feature
 <222> (1)...(296)
 <223> n = A,T,C or G

<400> 531
 aaagtatcat ttatttgaaa aacatacatt atcattntgt ttttgatatt tgataatgaa 60
 aaaaatcttt gnttgtttat ttctgaaaaa gaactgtatt tagngattat tttagatagt 120
 gatattatan cattcatctg tgtgtaaatt atttcatata gggaagagtt ctgatctgta 180
 cctatggttc ttattgaaaa caacattgga tgtgcatttc tgtgatgtta tgaatacatt 240
 tctactttat ttgaaacat ttgccaaact aaatactgta acactgtata acattt 296

<210> 532
 <211> 266
 <212> DNA
 <213> Homo sapiens

<400> 532
 acatatgcac caaattccat tttagaagtt tccatatcat tttcatagaa aacaaagttt 60
 gaaaacaagt aacattttaa cacagcacgg tattctacca caactgaaac ttttttcttc 120
 ttcttcttta caggactcaa caaaatctaa aaatgaacta tgctgtagat ttacctcatg 180
 caaagatctt tatgttatct ctgaaaatga aaaggatggc cttttaagca cattttactg 240
 ttttatacta ttatggcaac ttgtgt 266

<210> 533
 <211> 289
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(289)
 <223> n = A,T,C or G

<400> 533
 actcagaagt cacttttaat atcancgaca gaaatatctc actaattcaa ctgaggcaaa 60
 tttcctttct agacaaagga cctagaaatt gagcatgcaa aacatccatc cattcattca 120
 ttcaaataat tagccaattt taccgtcatt taattccacc agaagcaaat actagaatat 180
 ctagaagtag tttgggtaaa gaaacattta cattttaata ttgtgtaatg tcataaattt 240
 ggggctaaaa taacaccagg tcaaatttga tccctttgta tgtgaggg 289

<210> 534
 <211> 293
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(293)
 <223> n = A,T,C or G

<400> 534
 aaaataaaa gttctttaca agatgatacc ttaattacac tcccgcaaca cagccattat 60
 tttattgtct anctccagtt atctgtattt tatgtaattg aattgacagg atggctgctg 120
 cagaatgctg gttgacacag ggattattat actgctatct ttcctgaaat ttttttctt 180

tgaattccaa ctgtggacct tttatatgtg ccttcacttt agctgtttgc cttaatctct 240
acagccttgc tctccggggn ggtaataaa atgcaacact tggcattttt atg 293

<210> 535
<211> 408
<212> DNA
<213> Homo sapiens

<400> 535
acttgaacac ttaaagagaa aaactctaaa taaagtcata gaggggatgg tagagatgac 60
cacagaaaat gaccacggag agtattatga agattgcaag attagacatt gatgatgtaa 120
attactccct ttctagataa aataatccat agatgtttat gaatcatatt tgtatgatta 180
ttgctgttac tattattttg acacattatt tattattatt gttgtcacta ttattaccat 240
taagatagca ggcgtaaaac tgtactgggt ccttcagtag tgagtatttc tcatagtgca 300
gctttattta tctccaggat gtttttgtgg ctgtatttga ttgatatgtg cttcttctga 360
ttcttgctaa tttccaacca tattgaataa atgtgatcaa gacaaaaa 408

<210> 536
<211> 184
<212> DNA
<213> Homo sapiens

<400> 536
acctctcatc aaggctctgc ctacaggcac attgtgatgt atctctgcac tgatcaccta 60
ggtcagttaa cttttttcta ggctctacct acgatggcat tgtgacataa ctctgcacta 120
atcatccacg tgatgtaact cttgtctagg atgtgcctaa attaaccttt tgacgtaacc 180
ctgt 184

<210> 537
<211> 311
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(311)
<223> n = A,T,C or G

<400> 537
ccacagttgt atcatatagc atctntaaca tttcatctag gattatctag tatagatctt 60
actatatitg gggctatgtt gtatacaatg ttaacaagaa catatcttct ctgcatatat 120
gtgtgaatta taaagaaaag catgagaatg actctaagtt caacaaacat ggggtgaatct 180
ctatgtgctc ccagtgtcct ggatgggctc cccagcaagc cattcctcct tcctgttctg 240
atattactat tcttttttac attgtgctaa ggaggacaaa aggtgagaga tgaaaataaa 300
gccttgccct t 311

<210> 538
<211> 302
<212> DNA
<213> Homo sapiens

<400> 538
aaaataaaaa agcaaaaact cttgtggtac ctagtcagat ggtagacgag ctgtctgctg 60
ccgcaggagc acctctatac aggacttaga agtagtatgt tattcctggt taagcaggca 120

```

ttgctttgcc ctggagcagc tattttaagc catctcagat tctgtctaaa ggggtttttt 180
gggaagacgt tttctttatc gccctgagaa gatctacccc agggagaatc tgagacatct 240
tgcctacttt tctttattag ctttctctc attcatttct tttatacctt tcctttttgg 300
gg                                                    302

```

<210> 539
 <211> 396
 <212> DNA
 <213> Homo sapiens

```

<400> 539
actgtttatt tgctccttct cttcatgcct gtggctggat gtcccacaac actataagaa 60
atataagtca agccctttgt gttaagcaag aactacagac tccatctttt caccctaaatc 120
atgaatgacc aataaaaagc aagttattcc agaggaagaa gcagcccttg aaatgttaag 180
gcttaggctt gaaagggtgaa gagcaggaat tctctctttc aaatcctaga gcataaacc 240
atgtgtggcc aagtgaagatc agccctcaag ggcacatgcc aagggcagag cagcccatgt 300
agacagcttc ggagggcatg ggggtgtagg gagttcgggg tagctcctca ttaactattt 360
gttgggtgag taaagggtg aggctcagtg gcaggtt

```

<210> 540
 <211> 634
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(634)
 <223> n = A,T,C or G

```

<400> 540
ccaaaaacaa gatgaccaga tttgntttna gcctgatgac cctacaggtc gtgctatgat 60
atggagtcct catgggtaaa gcaggaagag agtgggaaag agaaccaccc cactctgtct 120
tcatatttgc atttcattgt taacctccgg ctggaaatag aaagcattcc cttagagatg 180
aggataaaaag aaagtttcag attcaacagg gggaagaaaa tggagattta atcctaaaac 240
tgtgacttgg ggaggtcagt catttacagt tagtcctgtg tctttcgact tctgtgatta 300
ttaacccac tcaactacct gtttcagatg catttggaat accaaagatt aaatccttga 360
cataagatct catttgcaga aagcagatta aagaccatca gaaggaaatt atttaggttg 420
taatgcacag gcaactgtga gaaactgttg tgccaaaaat agaattcctt ctagtttttc 480
ttgttctcat ttgaaaggag aaaattccac tttgttttagc atttcaagct tttatgtatc 540
catcccatct aaaaactcct caaactccac ttgttcagtc tgaaatgcag ctccctgtcc 600
aagtgccttg gagaactcac agcagcacgc ctta

```

<210> 541
 <211> 221
 <212> DNA
 <213> Homo sapiens

```

<400> 541
cacacaagca gcagagacca tggaaccct ctcagccct cctgcacac agcgcatcaa 60
atggaagggg ctctgtctca cagcatcact tttaaacttc tggaacctgc ccaccactgc 120
ccaagtacg attgaagccg agccaaccaa agtttccgag gggaaggatg ttcttctact 180
tgtccacaat ttgccccaga atcttaccgg ctacatctgg t

```

<210> 542

<211> 287
 <212> DNA
 <213> Homo sapiens

<400> 542
 cctcttctac tatggcagga gatgtggcgt gctgttgcaa agttttcacg tcatcgtttc 60
 ctggctagtt catttcatta agtggctaca tccaaacata tgcatttggt caagggtgca 120
 gaagaggact gaagattgac tgccaagcta gtttgggtga agttcactcc agcaagtctc 180
 aggccacaat ggggtgggtt gggttgggtt ccttttaact ttccttttgt tatttgcttt 240
 tctcctccac ctgtgtggta tattttttaa gcagaatttt atttttt 287

<210> 543
 <211> 274
 <212> DNA
 <213> Homo sapiens

<400> 543
 acttgtgaaa cacagctggt cttctgttct gcagacacgc cttccctca gccacacca 60
 ggcacttaag cacaagcaga gtgcacagct gtccactggg ccattgtggt gtgagcttca 120
 gatggtgaag cattctccc agtgtatgtc ttgtatccga tatctaacgc tttaaatggc 180
 tactttgggt tctgtctgta agttaagacc ttggatgtgg ttttaattgt tgtcctcaaa 240
 aggaataaaa cttttctgct gataagataa aaaa 274

<210> 544
 <211> 307
 <212> DNA
 <213> Homo sapiens

<400> 544
 ccagggtggt gtcttattgc accatactcc ttgcttcttg atgctgggca atgaggcaga 60
 tagcactggg tgtgagaatg atcaaggatc tggaccccaa agaatagact ggatggaaag 120
 acaaactgca caggcagatg tttgcctcat aatagtcgta agtggagtcc tgggaatttg 180
 acaagtgtct ttgggatata gtcaacttat tctttgagta atgtgactaa aggaaaaaaac 240
 tttgactttg cccaggcatg aaattcttcc taatgtcaga acagagtgca acccagtcac 300
 actgtgg 307

<210> 545
 <211> 570
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(570)
 <223> n = A,T,C or G

<400> 545
 accttagaaa tttgcaacca cctccctgaa agtcttctcc cacgttatta agtgcaatgt 60
 ttatggtaaa tgtagaagca tcatgatgag gacgaagaga acgctgtcgt tcaggggagt 120
 attttactac aaaattcagt agtgcaaatc ctttcgtata atagcctgca aagaccttca 180
 gtgtaactgg ngcaatgaac tcccggataa aatgaagcca tacattctcc agatcaactt 240
 gcttcatgtg gatatcatca gttgggacat tttcataacc accagatata cggctatcat 300
 gatgttttcc cccagaccat ttgcogtaat gttccatttc ttctaccaat tcatcacagg 360
 ctttttcaga aaatatgggg aacaaaaaga catctggaca gggctgttca actatatattt 420

```

cagtgaaaat ctttgaataa tcacggttta tatacttttc cttccagtcc acaggatttt 480
caaaaatctg ccagagggtca ttgttataat gggaagtatt gtaattagca gtggataata 540
gccttcctaaa ttcattgtcta ttagaaatgt                    570

```

<210> 546

<211> 589

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(589)

<223> n = A,T,C or G

<400> 546

```

aaaaaacttt tttaccaaag gtgctatttc tctgtaaaac actttttttt ggcaagttga 60
ctttattctt caattattat cattatatta ttgtttttta atattttatt ttcttgacta 120
ggtattaagc ttttgaattt atttttcagt agtcccacca cttcataggt ggaaggagtt 180
tggggttctt cctgggtgcag gggctgaaat aaccagatg cccccaccct gccacatact 240
agatgcagcc catagttggc cccctagct tccagcagtc cactatctgc cagaggagca 300
aggggtgcctt agaccgaagc cagggggaaga agcatcttca taaaaaactt tcaagatcca 360
aacattaatt tgtttttatt tattctgaga agttgaggca aatcagtatt cccaaggatg 420
gcgacaaggg cagccaagca gggcttagga tatcccagcc taccaatatg ctcattcgac 480
taactaggag ggtgagttgg cctgtctctt tcttttttct ggacctcagt ttccttcagt 540
ggagcttggt aaaaatgcac tacnntttga tttgataagg tataaatct                    589

```

<210> 547

<211> 293

<212> DNA

<213> Homo sapiens

<400> 547

```

actcctatta ttgactgtag tcaatcaaac ataaaaaggt gaaagtaaaa ttttaattttt 60
tacccttatt ttactgacca atatggaagt tcttggtatc tttaaggctg accttcctgg 120
tattgtgtaa tgattgaatg tatctaaact gtaataattt gaaactgaca aacataacct 180
tctcagactt acaaaaactat gttctttcta aagatacaga tttttattat tttattttga 240
ctaggaagga tttataaata aatgtaatga aaaatctttg atcttaataa agt                    293

```

<210> 548

<211> 98

<212> DNA

<213> Homo sapiens

<400> 548

```

aaacaaaggt tgagatgtaa aaggtattaa attgatgttg ctggactgtc atagaaatta 60
cacccaaaga ggtattttatc tttacttttt tttgtaca                    98

```

<210> 549

<211> 121

<212> DNA

<213> Homo sapiens

<400> 549

```

acatgcatat ttcaaagacc tgttaatggc gtccactttg gattcttaca tgaaacgatt 60

```

cagtgcacat tgtaagccta aggaccacgc aaaagggttt cccacatatt aagtattcag 120
t 121

<210> 550
<211> 509
<212> DNA
<213> Homo sapiens

<400> 550
acaatagtat acatthttata atgatgaact tataatgatt aagggacatt tctataaaaa 60
tactacaata gttttatgca caacttccca ttaaaaatga gatttcttat ttgtttgtct 120
gtttttactc tgggagtaat acttttttaa ttacctttac atatatagtc actggcatac 180
tgagaatata caatgatcct ggaaattgca gtaacaaaag cacacaacga ttatagtaac 240
tataagatac aataaaacaa ataaatgtga aagtagattc atgaaaatgt attcctttta 300
aatattgttt tcctacaggc ctatttaaca agatgtttca ttttactgta tattttgtag 360
ttaatataaa tgttgctcta atcagattgc ttaaaagcat ttttattata tttatgttgt 420
tgaactaata tatgaaataa gtaaattgtag ctcccacaag gtaaacttca ttggttaagat 480
tgcactgttc tgattatgta agcatttgt 509

<210> 551
<211> 427
<212> DNA
<213> Homo sapiens

<400> 551
accatgggta tatgattaat cttgggacaa agaattttat agaaattttt aaacatctgg 60
aaaagaagct taagttttat catccttttt tttctcgtga attcttaaag gattatgctt 120
taatgctgtt atctatctta ttgttcttga aaatacctgc attttttggt atcatgttca 180
accaacatca ttatgaaatt aattagattc ccatggccat aaaatggcct taaagaatat 240
atatatatatt ttaaagtagc ttgagaagca aattggcagg taatatttca tacctaaatt 300
aagactctga cttggattgt gaattataat gatatgcccc ttttcttata aaaacaaaaa 360
aaaaaataat gaaacacagt gaattttag agtgggggta tttgacatat tttacagggt 420
ggagtgc 427

<210> 552
<211> 340
<212> DNA
<213> Homo sapiens

<400> 552
cctcaaggcg gtccaattat ccacttgacg attctacaga aagagtgttt caaaactgct 60
ctgtcaagag aaatgggtcca ccgtgtgtgt ggaatgcagc catcacacat tagtttctga 120
gattgcttct gtcttggttt tatggggaga tatttccatt tctagcatag gcttcaaggc 180
gctctaaata tccgcttgga aatactacaa aaacagtgtt tcaaaactgc tgtatccaaa 240
ggaaggtgcc actcgtctgag ttgaatgcac acatcacaaag gaagtctctg agaattcttc 300
tgtctagatt catacgaaga aatcccggtt ccaacgaagg 340

<210> 553
<211> 549
<212> DNA
<213> Homo sapiens

<400> 553
acttgagctg tgaggatcat ggaatcccg cactgtcct catctggaac aaggtaaaaa 60

```

ggggtcacta tggagttcaa aggacagaac tcctgcctgg tgaccgggac aacctggcca 120
ttcagacccg ggggtggcca gaaaagcatg aagtaactgg ctgggtgctg gtatctcctc 180
taagtaagga agatgctgga gaatatgagt gccatgcac caattcccaa ggacaggctt 240
cagcatcagc aaaaattaca gtggttgatg ccttacatga aataccagtg aaaaagggtg 300
aaggtgccga gctataaacc tccagaatat tattagtctg catgggttaa agtagtcag 360
gataactaca ttacctgttc ttgcctaata agtttctttt aatccaatcc actaacactt 420
tagttatatt cactggtttt acacagagaa atacaaaata aagatcacac atcaagacta 480
tctacaaaaa tttattatat atttacagaa gaaaagcatg catatcatta aacaaataaa 540
atacttttt 549

```

<210> 554
 <211> 321
 <212> DNA
 <213> Homo sapiens

```

<400> 554
acctaataat atgttaacat aaacataaca acacacatat ttttttcta ccccttggca 60
actgaaaatg aagttaccat tcctaggcca aatttttaga caaagctttc taaaaccatc 120
tttataaagt aaattcagat atgcttaca taaaaagaca taaaagattc atcctgagat 180
gaattctgag tcaataacta aaaaccattt ctaccagtgc atcactacca tgtaatccat 240
tctacgcaag ctctacaaat attgagtcaa atcctgtctg tcagaaaatg aagacccaat 300
aagtttgccg aagtattcag t 321

```

<210> 555
 <211> 322
 <212> DNA
 <213> Homo sapiens

```

<400> 555
ctggatcccc agaatactgg aacaatagag ctgcacctta tctcttggct ctgtttctca 60
gtactttgaa gttataacta atctgcctga agactttctca tgatggaaaa tcagccaagg 120
actaagcttc catagaaata cactttgtat ctggacctca aaattatggg aacatttact 180
taaacggatg atcatagctg aaaataatga tactgtcaat ttgagatagc agaagtttca 240
cacatcaaag taaaagattt gcatatcatt atactaaatg caaatgagtc gcttaaccct 300
tgacaaggtc aaagaaaact tt 322

```

<210> 556
 <211> 286
 <212> DNA
 <213> Homo sapiens

```

<400> 556
aaaaaatatg tatctaagaa tgttctaggg cactctggga acctataaag gcaggatattt 60
cgggccctcc tcttcaggaa tcttcctgaa gacatggccc agtcgaaggc ccaggatggc 120
ttttgctgcg gcccgtggg gtaggagga cagagagaca gggagagtca gcctccacat 180
tcagaggcat cacaagtaat ggcacaattc ttcggatgac tgcagaaaat agtgttttgt 240
agttcaacaa ctcaagacga agcttatttc tgaggataag ctcttt 286

```

<210> 557
 <211> 459
 <212> DNA
 <213> Homo sapiens

<400> 557

```

acagaagatg aataataatg aaaaactgtg attttttgac tatcacatac attgtgttaa 60
aaaacaggta aatataatga ctattactgt taagaaagac aaggaggaaa actgtttcaa 120
tggtcagggt taaataactaa gcacaaaaat ataacaaatt ctgtgtctac aataattttt 180
gaagtgtata caagtgcatt gcaaatgagc tctttaaaaa tttaaagtcca tttccccttt 240
agccaagcat atgtctacat ttatgatttc tttctcttat tttaaagtct cttctggttt 300
agttttttaa aaagtttcat catggctgtc atcttggaat ctagcctcca gctcaaagct 360
gagacttcac gcatacatat tctcctttct ggggtgcatc tcacctagtt tctccaagta 420
ttcagagtta aatagcacia cttcttttat atgttcctt 459

```

```

<210> 558
<211> 303
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(303)
<223> n = A,T,C or G

```

```

<400> 558
aaaaaataaa aaacaagaca acaatttagt agaagtaccn ctgggagggg ggggagggga 60
aaaaaggata tacaggggca ggngtattct ctgtacagag gtgcananaa aatttcacat 120
anctttanag aatgccttgt ggaaaaaaa aaataggccc caatacttgt tactgccctt 180
tatcaaaact gtgtgcatga cctgcacaaa taaaatcaca aaacagtgtt gccacattct 240
tcaaggaaac aaagcaaaat ttagggggnt tcttttcctt ctccttgta aaagtcattt 300
ttt 303

```

```

<210> 559
<211> 232
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(232)
<223> n = A,T,C or G

```

```

<400> 559
aaagcattta ttaagaattt actcaggcat gatggcccat acttgtaatc ccagctattg 60
ggaaggatga gatgggagga tggcttgagg ccagagggtt gagaccgacc agccagggca 120
acacagttag accccttctc aaaaaaaaaa aaaaaaaaag agagagtgtg tgattagaag 180
ctaaatagga aagtttttag cttcaagtca gngaggagta aaaaagattt tt 232

```

```

<210> 560
<211> 336
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(336)
<223> n = A,T,C or G

```

```

<400> 560

```



```

ctctgcaaaa ataannataa aaaaataaat aaaattttta aaataataaa attcactata 60
tacacatata aagaaataaa aagaagtctc agttgcagct atttgtcaaa attaatatcc 120
atctcttttt atatacgggtg aatattgcgc aattatagat ctggattttg aaccacttaa 180
tgaagcggca acaccagggtg ttttgagggtg ttggcattct tcgctgattt ggctgttccc 240
aatgtttaca ttatttaaatc ttgcaaaaat ggttctgtgc acttggatgn gaaatgctgn 300
ccagntttat tttttttatg ttgntatcct tggatg 336

```

```

<210> 561
<211> 636
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(636)
<223> n = A,T,C or G

```

```

<400> 561
acattatggg ttttattgct ttctttttatg gtagacctgt taatggggaa aaaatacatc 60
aaatcaaata gaatcttata tctgtatggt aaaatagagc acttacctga agtcagtggc 120
ctggatcata gccctggatc atttcccagt ctgtcctgtg ctgtgtgacc ttggacaagg 180
cgcttcatct ctctgggcct ctattttctcc atttgtaaaa caagtggctg cagtagatga 240
tggtctgagag cccttcctgt tcccagatgc cttgggtcaa agaccccacc cctctgctgg 300
tcctgccaac gtgttggtgc tataagctgc ttcagatata aaattgggtt atctataatg 360
tttgttcatt taatagcttc taaaaggcct ttttggtata cagtgccttt tttctagttt 420
tatggacttg gttactgtaa taatgtcttg tttttagcca tgtaactaca aacagatatt 480
ctcttgatgt cttagtaaat ttgcatttga tatatcattg atgagatttt gttgttatgt 540
aatattcttt ggctacgcat ctgtccagca tcttattaac cataatactg ngatcattat 600
ttggaaatat gtcctatgga aagaataaaa gcatgt 636

```

```

<210> 562
<211> 708
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(708)
<223> n = A,T,C or G

```

```

<400> 562
acagtccacc ttttgataca tgccatgcct ttgatcaaag aacaggacat aaaaacaaag 60
tcacaatgac attccatagt aaatttggaa tcagaactcc aaatgcaact tcgggctcgc 120
tggaagaaca ctaaggggca ccaaaccctc tgaggtttta ctttaagggt cgctgtatgt 180
ttgccttgga caaaaaggct acctaccacg tgctatccag taatatactt aaataagcca 240
atacttagat ctactgtaag gcagatgcta attataaggc attaagtaag caaatagtgc 300
cctcagctac tgcagaagaa aagtccactc gaggaaaaga aagtcttgtg atttttaaag 360
gcaagttttc aagtgtctct atagttctat cctctaattc cattaaatcc atactaggag 420
cgtcagttag ggttttcata gcttttggaa atactttggt ctctgaactg taattagcaa 480
gaagtaaaaa cagaaacgtc aaacgtcaaa tgtttgcttt gttacctgga ggactaaatg 540
tagatgtctt tagtatactt tgtatgttct taatattgga agataatttt gtgaatctgt 600
agattttatt ttttcagtct taccttacia atttcttttc tatgaataat agaggactta 660
cngcactctg ccatttgtta atgaaaggaa ggcngangat ttagaaaag 708

```

<210> 563
 <211> 290
 <212> DNA
 <213> Homo sapiens

<400> 563
 ccagatgctc atccactttc agacttttcat ctcttctgcc atctgccaaa gtcaacagag 60
 ctttcgggaa gtcaccagat gtttcgggaa taatgtcatc tccaagactc ttcttgata 120
 ctgtataata ggcttgagag atatccttca tttgcctgct tgtcctggta gttaagattt 180
 caatcaaggc atcttcggtt gttcccgccg ccttcattga tttcttttagc tgctttgcat 240
 caaagactgc tgggtggagtc actagggcca ccatgagatg ctcaaagtgg 290

<210> 564
 <211> 530
 <212> DNA
 <213> Homo sapiens

<400> 564
 accaccagat acttaaaagct tcaaaaagac tgcccctacc accacaggag gaccagccta 60
 accatacgct ccaaaaagatg gctgtgatag atcttgtgaa gcaattactg agcagatcaa 120
 gatctttggg aaggaacact aaagatgttt tgaatgaatt atagtccact ggcatttttag 180
 tgtatttttt tttcttttta gaaacacaca tttctaaaaa tgtcatgtta cattcctgca 240
 tgtccctttt gatagcatta gtggatccat tggatttctt tttctttttt gtgagacagc 300
 ttttagtctt acctgaattt atgtgtgttt ttccgacagt ggtaataaat tatattggtg 360
 atgtagcagc aattgtgttg gcaggggttt catatattat tagtaattaa cactaactgt 420
 tggactgact tgtgtcgata gcgctcacgc aagcatgggt aacgtcccta aaaccgcgcg 480
 gactttctgt aagaagtgtg gcaagcacca accccataaa gtgacacagt 530

<210> 565
 <211> 450
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(450)
 <223> n = A,T,C or G

<400> 565
 ctgcttacgg aagcgtggnn tgactaggat gtgatttatt aacgaccaac ttctgttatt 60
 gtgtgttaag tttttcatct gtgcatcaaa tcacaaaaag aataaataga gctttttcct 120
 ttatcagtc cttgggcaca gcaggtcctg aacaccctgc tctacaatgt tgcataaaga 180
 gttcaaacia caaaataaaa aatattaaga ggaaatcccc atcctgtgac ttgagtcct 240
 taagtctaca ggggctggtg acctcttttt gctaatagga aaatcacatt actacaaaat 300
 ggggagaaaa ctgtttgcct gtggtagaca cctgcacgca taggattgaa gacagtacag 360
 gctgctgtac agagaagcgc ctctcacatc tgaactgcat actgagcggg caagtcgggt 420
 gtaagttag taaaaccctc tgatgatgcc 450

<210> 566
 <211> 563
 <212> DNA
 <213> Homo sapiens

<400> 566

```
<210> 567
<211> 424
<212> DNA
<213> Homo sapiens
```

```

<400> 567
ccagtgagca aattgaaaac caactgaaag caaatccaaa tgaggaagat tttaataaaag 60
gaataccctt ctccatagca ggtgcaatgc tgactgctca aggcgtgcgt gcgcgcgcac 120
acacacacac acacacacac atacatactc tcacacacnc atctttccaa ttaaactgca 180
ggtagaatga gattttgtgt tattcaaaaa atttgtaagt gatcaaaanc actgctatgg 240
aatgcctggt tatctgcctt tgntctggtt aaaatctcat aaaaatacat tcaacaggaa 300
aacatanatt gtatgtgtat aaatatatat gtatatatat atattatata cacatgcaca 360
caaatacttt tgttttttga agcataagat agttacataa atactcctat aattgctaaa 420
gttt
424

```

```
<210> 568
<211> 392
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (1)...(392)
<223> n = A,T,C or G
```

<400>	568						
actggctcac	tcagagagga	cgtccttcaa	ctatgccatg	aaggaggctg	ctgcagcggc	60	
tttgaagaag	aaaggatggg	aggtggtgga	gtcggacctc	tatgccatga	acttcaatcc	120	
catcatttcc	agaaaggaca	tcacaggtaa	actgaaggac	cctgcgaact	ttcagtatcc	180	
tgccgagtct	gttctggctt	ataaagaagg	ccatctgagc	ccgatatattg	tgggttganc	240	
aaaagaagaac	ttggaagccn	caagaacctt	gtgatattcc	agttccccct	gcantggggt	300	
tgggaagtc	ctgccntttt	gaaagctggt	ttgaagcgaa	tgttcatagg	aaagtttgct	360	
taccacttac	cctgcccattg	gtangacaaa	ag			392	

```
<210> 569
<211> 559
<212> DNA
<213> Homo sapiens
```

<400> 569

```

aaagagattt attaaatcat cttatcacaa agatggaaac atatacaaac tagaaacatg 60
caaccatcat cttccacagt caagtcacaa tgtcaaata ttttcttgcc tctgcagatg 120
aaaagttcag atcttatacc caactactta ctcaccccga atattttaagt cagtcttctt 180
gaaagtactc agggtagcaa gtaacaaaaat gcaaacgatt atataaagaa agtgcagtta 240
aaaaggaac tatgtggcaa gtaccctctt tcccttccca cccccaatt aaaggcaaac 300
aatggcactt tgctcttgct taacctagat tgtcttcaaa aactattaaa atgtaaaaga 360
cttaacaaaa aaacaaaaag acgtttaaca gatgtcaaaa agctccttag tgtttgaaaa 420
taaagtctta aacaaaagac aacatatttt atatcaaca agtttgaaga gccctgaatt 480
gcagcattct gtaacataaa caaacaaaaa gctggtatag gatttattgg caaaggcaga 540
atttcttcaa gcagggtaa 559

```

<210> 570

<211> 368

<212> DNA

<213> Homo sapiens

<400> 570

```

agccgcccgt ggatgctaag tccgatgtca ccaaccagct tgtagatttt cagtggaaac 60
tgggtatggc tgtgagctca gacacttgca gatctcttaa gtatccttac gttgcagtga 120
tgctaaaagt ggcagatcat tcaggccaag taaagaccaa gtgctttgaa atgacgattc 180
cacagtttca gaatttctac agacagttca aggaaattgc tgcagttatt gaaacgggtg 240
gaagacggat tctttggttg ataaattgct atcattctaa agtcatggac ttcactttcg 300
gcaacaaaac taaataagga tggaacattt attgaatgaa aaatgcactt ttgtttttcc 360
attttttt 368

```

<210> 571

<211> 261

<212> DNA

<213> Homo sapiens

<400> 571

```

acacgattgc tgcttccgct atatttgtga tataggaatt aagaggatac acacgtttgt 60
ttcttcgtgc ctgttttatg tgcacacatt aggcattgag acttcaagct tttctttttt 120
tgtccaagta tctttgggtc tttgataaag aaaagaatcc ctgttcattg taagcacttt 180
tacggggctg gtggggaggg gtgctctgct ggtcttcaat taccaagaat tctccaaaac 240
aattttctgc aggatgattg t 261

```

<210> 572

<211> 488

<212> DNA

<213> Homo sapiens

<400> 572

```

ctctcagctc tcggcgcaag gccagcttc cttcaaaatg tctactgttc acgaaatcct 60
gtgcaagctc agcttgagg gtgatcactc tacaccccca agtgcataat ggtctgtcaa 120
agcctatact aactttgatg ctgagcggga tgctttgaac attgaaacag ccatacaag 180
caaaggtgtg gatgaggta ccattgtcaa cattttgacc aaccgcagca atgcacagag 240
acaggatatt gccttcgcct accagagaag gaccaaaaag gaacttgcat cagcactgaa 300
gtcagcctta tctggccacc tggagacggt gatattgggc ctattgaaga cacctgctca 360
gtatgacgct tctgagctaa aagcttccat gaaggggctg ggaaccgacg aggaactctt 420
cattgagatc atctgctcca gaaccaacca ggagctgcag gaaattaaca gagtctacaa 480
ggaaatgt 488

```

<210> 573
 <211> 619
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(619)
 <223> n = A,T,C or G

<400> 573
 actttactga aagaacacta ntgtttctttc ctttccgttg tgaaaaaagt tgtttctgag 60
 gaattgaaac ccagaagat aactacaaca aaaacatggt aatttttttt taaaaatgat 120
 gattcaaagg cagatttgaa gggaagtaat atttaggtgg cagaagaagg caaatgcagc 180
 ctctgaaggg aactgttcta attattacct aaaaaataaa gttacacaac tatattcaag 240
 gacatgagat aaagcactgc ttgaaaacca gaatgactga acagttaggt gaaaaggaac 300
 agctgaaata ggaaggggaa atggactgaa gaataatttg aatcgggaca gtgatccatc 360
 agtcctagat gcttctgcta tgtaaataac ttgaatcaca ttgtttcctt tcttctgaaa 420
 tctcaaagga gaattctcac agcactacat taaggttgcc attttgtag gattcaaaat 480
 ttcaatccag tagccatcag gatcttgaat aaatgccagg cctttcattt taccatcatc 540
 aggtttcttc acaaatttga ctccagtctt caaccttttc aagcctgatc atcaggaaca 600
 caattccata tgaccgatc 619

<210> 574
 <211> 202
 <212> DNA
 <213> Homo sapiens

<400> 574
 acatccaccc cactatttct tcacataaccg aatcaggatt gaaatgtcaa aagatgcact 60
 tcttgagaag gcctgtcagt tggacagtcg ctattggaga ataacaaatg ctaaggggtga 120
 cgtggaagaa gttcaaggac ctggagtagt tggatgaattt ccaatcatca gccaggtcgc 180
 ggtatatgaa tacacaagct gt 202

<210> 575
 <211> 311
 <212> DNA
 <213> Homo sapiens

<400> 575
 ccacagttgt atcatatagc atctctaaca tttcatctag gattatctag tatagatctt 60
 actatatattg ggactatggt gtatacaatg ttaacaagaa catatcttct ctgcatatat 120
 gtgtgaatta taaagaaaag catgagaatg actctaagtt caacaaacat gggatgaatct 180
 ctatgtgctc ccagtgtcct ggatgggctc cccagcaagc cattcctcct tctgttcttg 240
 atattactat tcttttttac attgtgctaa ggaggacaaa agatgagaga tgaaaataaa 300
 gctttgcctt t 311

<210> 576
 <211> 134
 <212> DNA
 <213> Homo sapiens

<220>

<221> misc_feature
 <222> (1)...(134)
 <223> n = A,T,C or G

<400> 576
 ttttttgcacat caaaaagcctt tattttocatt tggncccaagg cttgttagga tagttaaaaa 60
 agctgcctat tggctggagg ganaggctta ggcaaaaancc ctattacttt gcaagggggcc 120
 cttcaaaaagt cgct 134

<210> 577
 <211> 488
 <212> DNA
 <213> Homo sapiens

<400> 577
 ctgatcagtg ggcctccaag gaggggctgt aaaatggagg ccattgtgtg agcctatcag 60
 agttgctgca aacctgaccc ctgctcagta aagcacttgc aaccgtctgt tatgctgtga 120
 cacatggccc ctccccctgc caggagcttt ggacctaatc caagcatccc ttgcccaga 180
 aagaagatgg gggaggaggc agtaataaaa agattgaagt attttgctgg aataagttca 240
 aattcttctg aactcaaact gaggaatttc acctgtaaac ctgagtcgta cagaaagctg 300
 cctgggtatat ccaaaaagcctt tttattcctc ctgctcatat tgtgattctg cctttgggga 360
 cttttcttaa accttcagtt atgatttttt tttcatacac ttattggaac tctgcttgat 420
 ttttgccctct tccagtcttc ctgacacttt aattaccaac ctgttaccta ctttgacttt 480
 ttgcattt 488

<210> 578
 <211> 476
 <212> DNA
 <213> Homo sapiens

<400> 578
 accatgcatt aagagcttcc tgattgagat tcagtgcatc agccgtgtct attccatcta 60
 cgtccacacc gtctgtgacc cactctttga agctgttgagg aaaatattca gcaatgtccg 120
 catcaacttg cagaaagaaa tataaatgac atttcaagga tagaagtata cctgattttt 180
 ttctttttaa ttttcctggt gccaatattca agttccaagt tgctaataca gcaacaattt 240
 atgaattgaa ttatcttggt tgaaaataaaa aagatcactt tctcagtttt cataagtatt 300
 atgtctcttc tgagctattt catctatttt tggcagtcctg aattttttaa acccatttaa 360
 atttttttcc ttaccttttt atttgcatgt ggatcaacca tcgctttatt ggctgagata 420
 tgaacatatt gttgaaaggt aatttgagag aaatatgaag aactgaggaa aaaaaa 476

<210> 579
 <211> 246
 <212> DNA
 <213> Homo sapiens

<400> 579
 ctggtgctca ctgagatggt aggttttccct attttccctgc tacatctgca caagctacat 60
 ctagaatgaa gccaccaatt tcaatgtgac caggcaatgg cagccagcac tgccttacac 120
 tggtttgatt ctgattccct aattctggcc actgcaggtg atgagtaagg gtggggatca 180
 gggaggaagt ccagaagcca gtctttgtct ccctttcctg cttatattta agtgcctatt 240
 tacatg 246

<210> 580
 <211> 615

<212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(615)
 <223> n = A,T,C or G

<400> 580
 gtcttcacag taataactaa tgggtggatcc taagggtgaaa ttatttcctt caaaatagnc 60
 atgaactgna ttcccaggag ggncacagtc cctacttttg canatgggaa agggagggtgc 120
 ccagggtgtg ttctctagac actgggtccg attgctgccc ttgaggatgt agtgggtcatt 180
 gcacataaac gtgattttgt cacttacatt cacaggccct gaagaactga actctccatt 240
 caccagcaca ggatcaggac agtggcccaa ggggcaactca gtagtgggtg tatcccactc 300
 cttagaggca ttgcaaaaaa ggggtcttct ttctaccagg tggtagccct tgatacaaac 360
 gtaagtcccc agaactctgtc ctccacctc ctttgcgaca aatatgctat tgtccactgg 420
 aggaagctct ggacagtgtc catctgaagc agaaactcgc cagcgaacca taagacagca 480
 cgcacaccaa aaaaacatct ggtgatcaaa gtctctccc caggctggaa ttcaccagc 540
 tcagacacct tacctgtctc tgtccctcca gagttagggc ttccancaa ggaactgggc 600
 ttaactgact tccaa 615

<210> 581
 <211> 576
 <212> DNA
 <213> Homo sapiens

<400> 581
 actcttggtg agttctgtag agccttctga tgtctctaaa gcactaccga ttctttggag 60
 ttgtcacatc agataagaca tatctctaata tccatccata aatccagttc tactatggct 120
 gagttctggg caaagaaaaga aagtttagaa gctgagacac aaaggggttg gagctgatga 180
 aactcacaaa tgatggtagg aagaagctct cgacaatacc cgttggcaag gactctgcct 240
 ccatgctgca gtgttcgagt ggattgtagg tgcaagatgg aaaggattgt aggtgcaagc 300
 tgtccagaga aaagatcctt tgttccagcc ctattctgcc actcctgaca ggggtgacct 360
 ggggtatttg aatattcctt tgggcctctg cttctctcac ctaaaaaaag agaattagat 420
 tatattgggt gttctcagca agagaaggag tatgtgtcca atgctgcctt cccatgaatc 480
 tgtctcccag ttatgaatca gtgggcagga taaactgaaa actcccattt acgtgtctga 540
 atcgagttag acaaaatttt agtccaaata acaagt 576

<210> 582
 <211> 939
 <212> DNA
 <213> Homo sapiens

<400> 582
 atgagcatcg gctcctgtg ctgtgcagcc ttgtctctcc tgtgggcagg tccagtgaat 60
 gctgggtgtca ctgagacccc aaaattccag gtcctgaaga caggacagag catgacactg 120
 cagtgtgccc aggatatgaa ccatgaatac atgtcctggg atcgacaaga cccaggcatg 180
 gggctgaggg tgattcatta ctgagttggg gctggtatca ctgaccaagg agaagtcccc 240
 aatggctaca atgtctccag atcaaccaca gaggatttcc cgctcagggt gctgtcggct 300
 gctccctccc agacatctgt gtacttctgt gccagcagtt actcagtcgg ggaggggcgg 360
 gattcacccc tccacttttg gaatgggacc aggtcactg tgacagagga cctgaacaag 420

```

gtgttccac ccgaggtcgc tgtgtttgag ccatcagaag cagagatctc ccacacccaa 480
aaggccacac tgggtgtgcct ggccacaggc ttcttccctg accacgtgga gctgagctgg 540
tgggtgaatg ggaaggaggt gcacagtggg gtcagcacgg acccgagcc cctcaaggag 600
cagcccgcgc tcaatgactc cagatactgc ctgagcagcc gcctgagggt ctcgccacc 660
ttctggcaga acccccgcaa ccaactccgc tgtcaagtcc agttctacgg gctctcggag 720
aatgacgagt ggacccagga tagggccaaa cccgtcaccc agatcgtcag cgccgaggcc 780
tggggtagag cagactgtgg ctttacctcg gtgtcctacc agcaaggggt cctgtctgcc 840
accatcctct atgagatcct gctagggaaag gccaccctgt atgctgtgct ggtcagcgcc 900
cttgtgttga tggccatggt caagagaaaag gatttctga 939

```

<210> 583

<211> 828

<212> DNA

<213> Homo sapiens

<400> 583

```

atgaactatt ctccaggctt agtatctctg atactcttac tgcttgaag aaccggtgga 60
aattcagtga ccagatgga agggccagtg actctctcag aagaggcctt cctgactata 120
aactgcacgt acacagccac aggataccct tcccttttct ggtatgtcca atatcctgga 180
gaaggctctac agctcctcct gaaagccacg aaggctgatg acaagggaag caacaaaggt 240
tttgaagcca cataccgtaa agaaaccact tctttccact tggagaaagg ctcagttcaa 300
gtgtcagact cagcgtgtga cttctgtgct ccgaaccctt ctcttcaggg cggatctgaa 360
aagctggtct ttggaaaggg aacgaaactg acagtaaacc catatatcca gaaccctgac 420
cctgccgtgt accagctgag agactctaaa tccagtgaac agtctgtctg cctattcacc 480
gattttgatt ctcaacaaa tgtgtcaca agtaaggatt ctgatgtgta tatcacagac 540
aaaactgtgc tagacatgag gtctatggac ttcaagagca acagtgtgtg ggctggagc 600
aacaaatctg actttgcatg tgcaaacgcc ttcaacaaca gcattattcc agaagacacc 660
ttcttcccca gccagaaaag ttctgtgat gtcaagctgg tcgagaaaag ctttgaaaca 720
gatacgaacc taaactttca aaacctgtca gtgattgggt tccgaatcct cctcctgaaa 780
gtggccgggt ttaatctgct catgacgctg cggctgtggt ccagctga 828

```

<210> 584

<211> 275

<212> PRT

<213> Homo sapiens

<400> 584

```

Met Asn Tyr Ser Pro Gly Leu Val Ser Leu Ile Leu Leu Leu Leu Gly
      5                      10                      15

Arg Thr Arg Gly Asn Ser Val Thr Gln Met Glu Gly Pro Val Thr Leu
      20                      25                      30

Ser Glu Glu Ala Phe Leu Thr Ile Asn Cys Thr Tyr Thr Ala Thr Gly
      35                      40                      45

Tyr Pro Ser Leu Phe Trp Tyr Val Gln Tyr Pro Gly Glu Gly Leu Gln
      50                      55                      60

Leu Leu Leu Lys Ala Thr Lys Ala Asp Asp Lys Gly Ser Asn Lys Gly
      65                      70                      75                      80

Phe Glu Ala Thr Tyr Arg Lys Glu Thr Thr Ser Phe His Leu Glu Lys
      85                      90                      95

```


Gly Ser Val Gln Val Ser Asp Ser Ala Val Tyr Phe Cys Ala Pro Asn
 100 105 110
 Pro Ser Leu Gln Gly Gly Ser Glu Lys Leu Val Phe Gly Lys Gly Thr
 115 120 125
 Lys Leu Thr Val Asn Pro Tyr Ile Gln Asn Pro Asp Pro Ala Val Tyr
 130 135 140
 Gln Leu Arg Asp Ser Lys Ser Ser Asp Lys Ser Val Cys Leu Phe Thr
 145 150 155 160
 Asp Phe Asp Ser Gln Thr Asn Val Ser Gln Ser Lys Asp Ser Asp Val
 165 170 175
 Tyr Ile Thr Asp Lys Thr Val Leu Asp Met Arg Ser Met Asp Phe Lys
 180 185 190
 Ser Asn Ser Ala Val Ala Trp Ser Asn Lys Ser Asp Phe Ala Cys Ala
 195 200 205
 Asn Ala Phe Asn Asn Ser Ile Ile Pro Glu Asp Thr Phe Phe Pro Ser
 210 215 220
 Pro Glu Ser Ser Cys Asp Val Lys Leu Val Glu Lys Ser Phe Glu Thr
 225 230 235 240
 Asp Thr Asn Leu Asn Phe Gln Asn Leu Ser Val Ile Gly Phe Arg Ile
 245 250 255
 Leu Leu Leu Lys Val Ala Gly Phe Asn Leu Leu Met Thr Leu Arg Leu
 260 265 270
 Trp Ser Ser
 275

<210> 585
 <211> 312
 <212> PRT
 <213> Homo sapiens

<400> 585
 Met Ser Ile Gly Leu Leu Cys Cys Ala Ala Leu Ser Leu Leu Trp Ala
 5 10 15
 Gly Pro Val Asn Ala Gly Val Thr Gln Thr Pro Lys Phe Gln Val Leu
 20 25 30
 Lys Thr Gly Gln Ser Met Thr Leu Gln Cys Ala Gln Asp Met Asn His
 35 40 45
 Glu Tyr Met Ser Trp Tyr Arg Gln Asp Pro Gly Met Gly Leu Arg Leu

50		55		60
Ile His Tyr Ser Val Gly Ala Gly Ile Thr Asp Gln Gly Glu Val Pro				
65		70		80
Asn Gly Tyr Asn Val Ser Arg Ser Thr Thr Glu Asp Phe Pro Leu Arg				
	85		90	95
Leu Leu Ser Ala Ala Pro Ser Gln Thr Ser Val Tyr Phe Cys Ala Ser				
	100		105	110
Ser Tyr Ser Val Gly Glu Gly Gly Asp Ser Pro Leu His Phe Gly Asn				
	115		120	125
Gly Thr Arg Leu Thr Val Thr Glu Asp Leu Asn Lys Val Phe Pro Pro				
	130		135	140
Glu Val Ala Val Phe Glu Pro Ser Glu Ala Glu Ile Ser His Thr Gln				
	145		150	155
Lys Ala Thr Leu Val Cys Leu Ala Thr Gly Phe Phe Pro Asp His Val				
	165		170	175
Glu Leu Ser Trp Trp Val Asn Gly Lys Glu Val His Ser Gly Val Ser				
	180		185	190
Thr Asp Pro Gln Pro Leu Lys Glu Gln Pro Ala Leu Asn Asp Ser Arg				
	195		200	205
Tyr Cys Leu Ser Ser Arg Leu Arg Val Ser Ala Thr Phe Trp Gln Asn				
	210		215	220
Pro Arg Asn His Phe Arg Cys Gln Val Gln Phe Tyr Gly Leu Ser Glu				
	225		230	235
Asn Asp Glu Trp Thr Gln Asp Arg Ala Lys Pro Val Thr Gln Ile Val				
	245		250	255
Ser Ala Glu Ala Trp Gly Arg Ala Asp Cys Gly Phe Thr Ser Val Ser				
	260		265	270
Tyr Gln Gln Gly Val Leu Ser Ala Thr Ile Leu Tyr Glu Ile Leu Leu				
	275		280	285
Gly Lys Ala Thr Leu Tyr Ala Val Leu Val Ser Ala Leu Val Leu Met				
	290		295	300
Ala Met Val Lys Arg Lys Asp Phe				
305		310		

<211> 97
 <212> PRT
 <213> Homo sapiens

<400> 586
 Glu Val Glu Val Ser Arg Asp His Ala Ser Leu Gly Asp Ser Glu Thr
 5 10 15
 Leu Ser Gln Thr Glu Leu Arg Lys Lys Glu Arg Lys Lys Lys Arg Glu
 20 25 30
 Arg Lys Phe Gln Ala Asn Cys Gly Ile Asp Phe Ile Ile Phe Trp Ile
 35 40 45
 Phe Trp Ile Leu Leu Phe Ser His His Trp Ile Gln Glu Ser Leu Leu
 50 55 60
 Cys Pro Pro Ser Pro Lys Glu Val Thr Cys Arg Glu Met Leu Thr Gly
 65 70 75 80
 Gly Cys Leu Pro Trp Ala Thr Arg Ser His Leu Gly Arg Arg Lys Cys
 85 90 95

Ser

<210> 587
 <211> 16
 <212> PRT
 <213> Homo sapiens

<400> 587
 Phe Gln Ala Asn Cys Gly Ile Asp Phe Ile Ile Phe Trp Ile Phe Trp
 1 5 10 15

<210> 588
 <211> 530
 <212> DNA
 <213> Homo sapiens

<400> 588
 gaattcggca cgagggtgag aggtgagat gcaggagctc gccatccagc tgcacaagcg 60
 ctgcgaggag gtagaggcca cgcggggcca ggtgtgtcag gaggcaggagc tgcgcgccgt 120
 ggtggagagc tgctgctgga gcaggaccgc gcccgcgagg acctccaggc ccggctgctg 180
 gagacgtggg ccttgcccg ggatgctgcc ctgctcctgg accagctgag agcctgtcaa 240
 gctgagctgt catctogagt gaggcaggac cagccccctg gtacagccac tctgggccta 300
 gccgtccccc cagctgactc caagggtgag caagcgtccc tgcaggccat gagcctcccc 360
 gagctctcgg gagccctgga ggaccgtgtc cgtgagatgg ggcaagcact gtgcttagtg 420
 acccagagcc tggagaagct gcagggtgctg aacgggaaga agtggcgga gacctagcct 480
 gcggggccgaa tctgacgttg ggtgattggt ccaccctgaa gctgtgtgcc 530

<210> 589
 <211> 349

<212> DNA

<213> Homo sapiens

<400> 589

```

gaattcggca cgaggccagt tcagtctgca agcgccagct cctctcatgg ccggcttacc 60
caccgccttg ccaatgcccc ggggcaaaacc tcataccacc acttccagaa cactgatcat 120
gacaaccaac aatcaggtac gtggtcctct ggcaaccttc ccgctggtgg tccctgggaa 180
cagcatccga gctgtgatat gcactagagg agattgatgg tcctttgaat tagaagagta 240
actttttgag tatttggcca ttggtgtgtt gttctaggaa atcctctctt ttttgtggtg 300
ttgaggtccc ccatgtatag tttcagcagc gaggacactg tggttcttg 349

```

<210> 590

<211> 509

<212> DNA

<213> Homo sapiens

<400> 590

```

gaattcggca cgaggcaatc atggcgccac ctgtgagata ctgcatcccc ggogaacgtc 60
tgtgtaactt ggaggagggc agcccgggca gcggcaccta caccgccac ggctacatct 120
tttcgtcgct tgccggctgt ctgatgaaga gcagcgagaa tggcgcgctt ccagtgggtg 180
ctgtagttag agaaacagag tcccagttac tgccagatgt gggagctatt gtaacctgta 240
aggtctctag catcaattca cgctttgcca aagtacacat cctgtatgtg ggggtccatgc 300
ctcttaagaa ctcttttcga ggaactatcc gcaaggaaga tgtccgagca actgaaaaag 360
acaaggttga aatttataag agtttccgcc cagggtgacat tgtcttggcc aaagtgatct 420
ccttaggtga tgcacagtc aactacctgc taaccaccgc cgagaacgag ctgggagtg 480
tggtagccca cagttagtca ggtatccag 509

```

<210> 591

<211> 510

<212> DNA

<213> Homo sapiens

<400> 591

```

gaattcggca cgagggtgcat gttgtgtgag gatcccgggg ccgcccgcgtc gctcggggccc 60
cgccatggcc gtcaccatca cgctcaaaac gctgcagcag cagaccttca agatccgcat 120
ggagcctgac gagacgggtga aggtgctaaa ggagaagata gaagctgaga agggtcgtga 180
tgccctcccc gtggtctggac agaaactcat ctatgcgggc aagatcttga gtgacgatgt 240
ccctatcagg gactatcgca tcgatgagaa gaactttgtg gtctcatgg tgaccaagac 300
caaagccggc cagggtacct cagcaccccc agaggcctca cccacagctg ccccagagtc 360
ctctacatcc ttcccgcctg ccccaacctc aggcattgtc catccccac ctgccgccag 420
agaggacaag agcccatcag aggaatccgc cccacgacg tccccagagt ctgtgtcagg 480
ctcttgttcc ctcttcagggt aacaaccggg 510

```

<210> 592

<211> 432

<212> DNA

<213> Homo sapiens

<400> 592

```

gacatgtaat ttttatttat ttttcacct caacaaggaa gaaaggctct tccctcaatt 60
ctgtctttcc aatacttgag gataggcacc cctaaccctc cttcctccag ggaggcctca 120
gcatcagtgt ctgtggacgt agtctctgaa gagtgttca gctgatggg aaggagaaac 180
tcaagacaga gatcctcta gggatggcgt cactttctg ccaactttct cgttgcctct 240
ccttgaaagc agaagaagt ccagccctca gcttccgtca gatcttgggc tcctagggcc 300

```

```

ttgtacaagt ccatggccct ctgggtccag tccaggacgg ccaggcggaa ttgggagcag 360
cccttatcca aggccacctc agccaccttt ttgattatth tggaaccaat cccttgacct 420
cgatattccg gc                                     432

```

```

<210> 593
<211> 614
<212> DNA
<213> Homo sapiens

```

```

<400> 593
gaattcggca cgaggcgcag agttgtcgct actggagaag tccctgggac tgagtaaggg 60
gaataaatac agtgctcagg gcgagcgaca gattccagtt cttcagacaa acaatgggtcc 120
aagtctaaca ggattgacta ctatagcagc tcatctagtc aagcaagcca acaaagaata 180
tttgctgggg agtactgcag aagaaaaagc aatcgttcag cagtgggttag aatacagggt 240
cactcaagta gatgggcaact ccagtaaaaa tgacatccac acactgttga aggatcttaa 300
ttcatatctt gaagataaag tctacottac aggggtataac ttacattag cagatatact 360
attgtactat ggacttcacg gctttatagt tgacctgaca gttcaagaaa aggagaaata 420
tcttaatgta tctcgctggg tttgtcacat tcagcattat ccaggcatca ggcaacatct 480
gtctagtgtt ggtcttcacg aagaacagac tatatactaa tccccctaga aagctgtcca 540
tgccatacag aagatctatt aaaaaatggt ttaaaatgga aaatgtactc ttagaaccac 600
aggacttaat ggta                                     614

```

```

<210> 594
<211> 336
<212> DNA
<213> Homo sapiens

```

```

<400> 594
gaattcggca cgaggggcac aacagagcgc ctccccctct ctcgccccgc caccgggacg 60
gagagcgccc gccgggtgcat ttccggcgac acctgcaggt cattcctgcy gcttgcygcy 120
ccttgtagac agccggggcc ttctgtgaga cgggtgcaggc ctggggtagt ctctgtctcy 180
gacagagaag agaaaaatgc aggacactgg ctcaagagtg cctttgcatt ggtttggctt 240
tggtaccca gcaactggtt ctctgtgttg gaatatttgc tattgaaaag caagcaagcy 300
tgccgtccct ggctgcaggg ctgctctttt ggaagt                                     336

```

```

<210> 595
<211> 487
<212> DNA
<213> Homo sapiens

```

```

<400> 595
gaattcggca cgagggtgact gtgggaaact cggaaacaag ctcacatctt cctgtgggaa 60
accttctagc aacaggatga gtctgcagtg gactgcagtt gccaccttc tctatgcgga 120
ggctcttctt gtgttgcttc tctgcattcc ctctatttct cctaaaagat ggcaagaat 180
tttcaagtcg cggttggttg agttgttagt gtccatagtc aacaccttct ttgtggttct 240
cattgtcatc cttgtgctgt tggtcacaga tgccgtgcgc gaaattcgga agtatgatga 300
tgtgacggaa aaggtgaacc tccagaacaa tccccgggccc atggagcact tccacatgaa 360
gcttttccgt gccagagga atctctacat tgctggcttt tcttgctgc tgtccttct 420
gcttagacgc ctggtgactc tcaatttcga gcaggccacg ctgctggcct ccaatgaagc 480
ctttaa                                     487

```

```

<210> 596
<211> 418
<212> DNA

```

<213> Homo sapiens

<400> 596

```
gaattcggca cgaggccgtg acctgctagc tgagcagcgc ttcccggggc gcgtgctgcc 60
ctcggacttg gacctgctgt tgcacatgaa caacgcgcgc tacctgcgcg aggccgactt 120
tgcgcgcgtc gcgcacctga cccgctgcgg ggtgctcggg gcgctgaggg agttgcgggc 180
gcacacgggtg ctggcggcct cgtgcgcgcg ccaccgcgcg tcgctgcgcg tgcctggagcc 240
cttcgaggtg cgcacccgcc tgcctgggctg ggacgaccgc gcgttctacc tggaggcgcg 300
ctttgtcagc ctgcgggacg gtttcgtgtg cgcgctgctg cgcttccggc agcacctgct 360
gggcacctca cccgagcgcg tcgtgcagca cctgtgccaa cgcaagggtg aacccct 418
```

<210> 597

<211> 418

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 205

<223> n = A,T,C or G

<400> 597

```
gaattcggca cgaggctggc tcccacccgt gagttggctc aacagattga ggaagagacc 60
atcaagtttg ggaaaccgct aggtatccgc actgtggctg tcattgggtg catctccaga 120
gaagaccagg gcttcaggct gcgcattggg tgtgagattg tgattgctcc cctgggcgctt 180
tgattgatgt gctggaaaac ccgtnccttg tgcttgacct gctgtacctg tgtgggtctg 240
gatgaggcag ataggatgat tgacatgggc tttgagccag atgtccagaa gatcctggag 300
cacatgcctt gtcagcaacc agaagcccaa acacggatga agcttgagga cccctgagaa 360
aaatgcttgg ccaacttttg agtcgggaaa acattaagta cccgcccaaa cagtcatt 418
```

<210> 598

<211> 266

<212> DNA

<213> Homo sapiens

<400> 598

```
gaattcggca cgagggtctc tcaactgagt cctactttta tgcctgcct gtggtgagca 60
caaagtgtga gcacatcaat ccccatTTTT tagacgaaga gacagagttg agtgacttgc 120
ccaaagacac agggccagtg aggagttgtg caggtttgcc ctggcattaa aataataaac 180
attgaaattc agtcgattcc cctatggact cagttataga tctcatcagt tgaaggaaga 240
gagatgcctt ttcctattca accttt 266
```

<210> 599

<211> 235

<212> DNA

<213> Homo sapiens

<400> 599

```
gaattcggca cgagggtctc tgcagccttt tcgctgggac tgcgcgacac cgccccccga 60
ccgggtgccc gctgtgtgct aggccgggtg ctgggcacgg tcccgcgagt gccctataag 120
gactgccagg caataatgaa ggttctttta ctgaaggatg cgaaggaaga tgactgtggc 180
caggatccgt atatcaggga attaggatta tatggacttg aagccacttt gatcc 235
```

<210> 600

<211> 386
 <212> DNA
 <213> Homo sapiens

<400> 600
 gaattcggca cgaggggttcc tcgcggggccg ccgggtgctg gtcaccgggg caggcaaagg 60
 tataggcgcg ggcacgggtcc aggcgctgca cgcgacgggc gcgcgggtgg tggctgtgag 120
 ccggactcag gcggatcttg acagccttgt ccgcgagtgc ccggggatag aaccctgtgt 180
 cgtggacctg ggtgactggg aggccaccga gcgggcgctt gggcagcgtg ggccccgtgg 240
 acctgctggt gaacaacgcc cgctgtcgcc ctgctgcagc ccttcctgga ggtcaccaag 300
 gaggcctttg acagatcctt tgagggtgaac ctgctgcagg catccagtgt cacagattgt 360
 ggcaggggct taatacccgg gagtcc 386

<210> 601
 <211> 406
 <212> DNA
 <213> Homo sapiens

<400> 601
 gaattcggca cgaggggctg ctggctggct aagtccctcc cgctcccggc tctcgctca 60
 ctaggagcgg ctctcggtgc agcgggacag ggcgaagcgg cctgcgccca cggagcgcgc 120
 gacactgccc ggaagggacc gccacccttg cccctcagc tgccactcg tgatttccag 180
 cggcctccgc gcgcgcacga tgccctcggc caccagccac agcgggagcg gcagcaagtc 240
 gtccggaccg ccaccgccgt cgggttcctc cgggagttag gcggccgcgg gagccggggc 300
 cgccgcgcgg gcttctagca ccccgcaacc ggcaccggcg ctgtccagac cgaggccatg 360
 aagcagattc tcgggggtgat cgacaagaaa cttcggaacc tggaga 406

<210> 602
 <211> 365
 <212> DNA
 <213> Homo sapiens

<400> 602
 gaattcggca cgaggctcgc ctactagga gcggctctcg gtgcagcggg acagggcgaa 60
 gcggcctgcg cccacggagc gcgcgacact gcccggaagg gaccgccacc cttgccccct 120
 cagctgcccc ctctgtattt ccagcggcct ccgcgcgcgc acgatgccct cggccaccag 180
 ccacagcggg agcggcagca agtcgtccgg accgccaccg ccgtcgggtt cctccgggag 240
 tgaggcggcc gcgggagccg gggccgcgcg ccggcttcta gcaccccgca accggcaccg 300
 gcgctgtcca gaccgaggcc atgaagcaga ttctcggggg gatcgacaag aaacttcgga 360
 acctg 365

<210> 603
 <211> 376
 <212> DNA
 <213> Homo sapiens

<400> 603
 gaattcggca cgaggctttg gccactcaga gccccgggc cgcggctcgc gtacgcctga 60
 aggcgggtcg tgccggcggc cgctctagtc tccgcctcgc ctacggccgg tcctccgggg 120
 cttctcaatg gtttcccggt ggctctcaa tggttttccc ggccggccctt gcgcgcagcg 180
 caggagactt ccggagcttg gtgacgtcac agagcgagct tttctaccca aatacgcggc 240
 gggggaatag gctcgagggc ggggagcagt gacaattgct aggcggagac agtgcaggga 300
 agagagacct tataaagat caggactggc gggagggtatt taactgaaag gaatatctgc 360
 ttactgttg caacca 376

<210> 604
 <211> 385
 <212> DNA
 <213> Homo sapiens

<400> 604
 gaattcggca cgaggcttgg gtccgctcgt gcttcggtgt ccctgtcggg cttcccagca 60
 gcggcctagc gggaaaagta aaagatgtct gaatatattc gggtaaccga agatgagaac 120
 gatgagccca ttgaaatacc atcggaagac gatgggacgg tgctgtcttc cacggttaca 180
 gccagtttc caggggctgt tgggcttcgc tacaggaatc cagtgtctca gtgtatgaga 240
 ggtgtccggc tggtagaagg aattctgcat gcccagatg ctggctgggg aaatctggtg 300
 tatgttgta actatccaaa agataacaaa agaaaaatgg atgagacaga tgcttcatca 360
 gcagtgaag tgaaaagagc agtcc 385

<210> 605
 <211> 395
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 375
 <223> n = A,T,C or G

<400> 605
 gaattcggca cgagggggag cggagagcgg accccagaga gccctgagca gccccaccgc 60
 cgccgccggc ctagttacca tcacaccccg ggaggagccg cagctgccgc agccggcccc 120
 agtcaccatc accgcaacca tgagcagcga ggccgagacc cagcagccgc ccgccgcccc 180
 ccccgccgcc ccgcccctca gcgccgccga caccagccc ggcactacgg gcagcggcgc 240
 aaggagcggg ggcccgggcg gcctcacatt cggcgggggc ttgccggcgg ggacaaagaa 300
 agggcattcg caacgaaggg ttttgggaaa caagtataat gggttcaatt gtaagggaac 360
 cggattttgg ttttnattca accagggaaa ttgac 395

<210> 606
 <211> 282
 <212> DNA
 <213> Homo sapiens

<400> 606
 gaattcggca cgagggcagg ggtggtcctg gctggcattg cctgagccgg cagtgatgaa 60
 gtggggagct tgcccttgac aggtgggggc tggctggggc cttaatgtga aaagacagt 120
 gcaggcagct ggagtagagc gagcccagca gccctaaaag gctgccttca tggccatcta 180
 gccccagttc agggcagcat ccatagccca caagccagcg tgggtggggc gggggtggtc 240
 ccacagctgg gttccacctg aagagcctcc gtgcctcgga gc 282

<210> 607
 <211> 615
 <212> DNA
 <213> Homo sapiens

<400> 607
 gaattcggca cgaggccggg cggcctgggc aaactgogct gaagatgccg ggaaaactcc 60
 gtagtgacgc tggtttgga ttagacaccg caatgaaaaa aggggagaca ctgcgaaagc 120


```

aaaccgagga gaaagagaaa aaagagaagc caaaatctga taagactgaa gagatagcag 180
aagaggaaga aactgttttc cccaaagcta aacaagttaa aaagaaagca gagccttctg 240
aagttgacat gaattctcct aaatccaaaa aggcaaaaaa gaaagaggag ccattctcaa 300
atgacatttc tcctaaaacc aaaagtttga gaaagaaaaa ggagcccatt gaaaagaaag 360
tggtttcttc taaaacccaa aaagtgacaa aaaatgagga gccttctgag gaagaaatag 420
atgctcctaa gcccaagaag atgaagaaag aaaaggaaat gaatggagaa actagagaga 480
aaagcccaa actgaagaat ggatttcctc atcctgaacc ggactgtaac ccagtgaaag 540
ctgccagtga agaaagtaac agtgagatag agcaggaaat cctgtggaac aaaaagaagg 600
cgctttctct atttt                                     615

```

<210> 608

<211> 316

<212> DNA

<213> Homo sapiens

<400> 608

```

gaattcggca cgaggagaaa gggaaaaaag gcgtaaagac agacatgaag caagtgggtt 60
tgcaaggaga ccagatccag attctgatga agatgaagat tatgagcgag agaggaggaa 120
aagaagtatg ggcggagctg ccattgcccc acccacttct ctggtagaga aagacaaaga 180
gttaccgccg gattttcctt atgaagaagg actcaagacc tcgatcacag tctttccaag 240
cagccctttc ttccccaggt gtaccgaagg aaccaagaac agacccgaga atcttcacc 300
cggaccctta gcaaac                                     316

```

<210> 609

<211> 393

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 267

<223> n = A,T,C or G

<400> 609

```

gaattcggca cgaggggtgaa accaacttat tgggctcaat ccattttggt cacaggatac 60
tgtacgtatc ttcttttcca gagatttgat atcaccaga caccgccagc atacataaac 120
gtgttaccag gtttgcccca gtacaccagc atatatacac ctttgccag cttttctcct 180
gaatatcagc taccaagatc agtaccagtg gtgccgtctt ttgtagccaa tgacagagca 240
gaaaaaaatg ctggctgcct attttgnngg gcattcattt tgaaatggct tgagaaatgg 300
ttggctgggt caccagaat tggccttctt gaaaaccaca agaatccctt tggaaggggg 360
cttctttttg gggaaaataa tcttggttaa aag                                     393

```

<210> 610

<211> 454

<212> DNA

<213> Homo sapiens

<400> 610

```

gaattcggca cgaggcagca atgcggtaga tatgacgtaa acaaattata attaagctag 60
tggaactca gagatcaaaa gaactgcaca ttgcattctg gagcatgaga aatcattttt 120
tttttcatga tgtctaactc tactgaattt attcaatgga gataacagaa agatgattat 180
atatgattaa attacttcca gtattagcag atgcttattt aaatacttgc ttgttctttc 240
tgcaattcca catagaatta aggcaatagt ttaaaagaaa atttaaaaag taactttttc 300
agcattttta tgtagacctg tgaattctaa cacatttgca gtgtagccat cctaagtact 360

```

aaccagactt gaacaaaatc caacttgcaa aaacgatgca atataaatac caatcaccaa 420
 taataggtag tctcactttt aaaaacctgt gtct 454

<210> 611
 <211> 613
 <212> DNA
 <213> Homo sapiens

<400> 611
 gaattcggca cgaggtgctc tcttcgttgc ccagtttccg ctccagtggc gcgtctccgc 60
 cccccaccca ccagtccgc tgcattctcg gccgggctct aggcgccatg gctccccgcg 120
 ggagggaagc taaggctgag gccgcggtgg tcgccgtagc cgagaagcga gagaagctgg 180
 cgaacggcgg ggagggaatg gagggagcga ccgttggtat cgagcattgc actagctgac 240
 gcgtctatgg gcgcaacgcc gcggccctga gccaggcgct gcgcctggag gccccagagc 300
 ttccagttaa ggtgaacccg acgaagcccc ggagggggcag ctccgaggtg acgtctgtgc 360
 gcccgagcgg cagcagtgcg gagctctgga ctgggattaa gaagggggcc ccacgcaaac 420
 tcaaatccccc tgagcctcaa gaggtggtgg aagagttgaa gaagtacctg tcgtagggag 480
 atttgggtag aagccctcat gctgagcttt gtgtccctgg tgatgttgga acattaatga 540
 tggacatgg ccaaacttca gtcattgatc tgaagccatg gtttcttccc tgccagaaat 600
 gaaggttcat tat 613

<210> 612
 <211> 313
 <212> DNA
 <213> Homo sapiens

<400> 612
 gaattcggca cgaggcgaga acggggcacgg ggagcagcag cctcaaccgc cggcgacgca 60
 gcagcaacag ccccaacagc agcgcggggc cgccaaggag gcccggggga agagcagcgg 120
 ccccacctcg ctgttcgcgg tgacgggtgg gccgcccggg gcgaggcagg gccagcagca 180
 ggcgggaggt aagaagaagg cggaaggcgg cggaggcggc ggtcgccccg gggctccggc 240
 ggcgggggac ggcaaaacag aacagaaagg cggagataaa aagaggggtg ttaaaagacc 300
 accacaagat cat 313

<210> 613
 <211> 557
 <212> DNA
 <213> Homo sapiens

<400> 613
 gaattcggca cgaggcctgg ccggggagac gagttgcatg tgttggttca gctggcgata 60
 gcggcgggag cggagccggc ggggcctgtg cgaccgcctg ggtttgtgaa atggctgctg 120
 acatttctga atccagcggg gctgactgca aaggagacc aaggaacagt gccaggttag 180
 atgccgatta cccacttoga gtcccttatt gtggagtctg ttcattacca acagagtact 240
 gtgaatatat gcctgatgtt gctaaatgta gacaatggtt agagaagaat ttccaaatg 300
 aatttgcaaa acttactgta gaaaattcac ccaaacaaga agctggaatt agtgagggtc 360
 aaggaacagc aggggaagaa gaggagaaga aaaaacagaa gagaggtgga aggggtcaaa 420
 taaaacaaaa aaagaagacc gtaccacaaa aggttactat agccaaaatt cccagagcaa 480
 agaagaaata tgtgacaaga gtatgtggcc ttgcaacttt tgaaattgat cttaaagaag 540
 cacaaagatt ttttgct 557

<210> 614
 <211> 627
 <212> DNA

<213> Homo sapiens

<400> 614

```

gaattcggca cgaggctcac taggagcggc tctcggtgca gcgggacagg gcgaagcggc 60
ctgcgcccac ggagcgcgcg aactgcccg gaagggaccg ccacccttgc cccctcagct 120
gccactcgt gatttccagc ggcctccgcg cgcgcacgat gccctcggcc accagccaca 180
gcgggagcgg cagcaagtcg tccggaccgc caccgccgtc gggttcctcc gggagtggag 240
cgcccgcggg agccggggcc gccgcgccg cttctcagca ccccgcaacc ggcaccggcg 300
ctgtccagac cgaggccatg aagcagattc tcgggggatg cgacaagaaa cttcgggaacc 360
tggaagaaga aaagggtaag cttgatgatt accaggaacg aatgaacaaa ggggaaaggc 420
ttaatcaaga tcagctggat gccgtttcta agtaccagga agtcacaaat aatttggagt 480
ttgcaaaaaga attacagagg agtttcatgg cactaagtca agatattcag aaaacaataa 540
agaagacagc acgtcgggag cagcttatga aaaaagaact gaacagaaac gtttaaaaac 600
tgttacttga actacagtat tgtttgg                                     627

```

<210> 615

<211> 474

<212> DNA

<213> Homo sapiens

<400> 615

```

gaattcggca cgagggcgag aacgaccccc ggaccgacca aagcccgcg gcgctgcat 60
cccgcgtcca gcacctacgt cccgctgccg tcgccgcgcg caccatgcc aagagaaagg 120
ctgaagggga tgctaaggga gataaagcaa aggtgaaggga cgaaccacag agaagatccg 180
cgaggttgtc tgctaaacct gtcctccaa agccagagcc caagcctaaa aaggcccctg 240
caaagaaggg agagaaggta cccaaaggga aaaagggaaa agctgatgct ggcaaggagg 300
ggaataaccc tgcagaaaat ggagatgcca aaacagacca ggcacagaaa gctgaagggtg 360
ctggagatgc caagtgaagt gtgtgcattt ttgataactg tgtacttctg gtgactgtac 420
agtttgaaat actatttttt atcaagtttt ataaaaatgc agaattttgg tttta 474

```

<210> 616

<211> 576

<212> DNA

<213> Homo sapiens

<400> 616

```

gaattcggca cgaggggaat ctgtgaagct cactactgga ccaaacaacg ctggagctca 60
aagtagttct tcatgtggga cttctggcct tcagttttct gcacagacag ccttggcaga 120
acaacagcca aaaagcatga aaagcccagc ttctccagag cctggtttct gtgctactct 180
ttgccctatg gtagaaattc cacctaaaga tataatggca gaattggagt cagaggatat 240
cttgatccct gaagaatctg taattcagga ggaaattgca gaagaggtag agactagtat 300
ctgtgaatgc caggatgaaa atcataagac aatacctgaa tttctgagg aggctgaaag 360
tctaaccaat tctcatgaag aaccccaaat agcacctcct gaagataact tggaatcctg 420
tgttatgatg aatgatgttt tagaaaactt gccctcatatt gaagttaaga tagaaggga 480
gtcagaatca cccaggaag aaatgacagt tgttatcgat cagttagaag tctgtgactc 540
tcttattcct tccattcat ctatgactca tgtcag                                     576

```

<210> 617

<211> 514

<212> DNA

<213> Homo sapiens

<400> 617

```

gaattcggca cgaggcagag aggtttgcc aagagcgcag gctgagaata tggagagact 60

```

```

atgtggctcc cacagctaatt ttggaccaaaa aggacaagca gtttgttgcc aaggtgatgc 120
aggttctgaa tgctgatgcc attgttggtga agctgaactc aggcgattac aagacgattc 180
acctgtccag catccgacca ccgaggctgg agggggagaa caccagcat aagaacaaga 240
aactgcgtcc cctgtatgac attccttaca tgtttgaggc ccgggaattt cttcgaaaaa 300
agcttattgg gaagaagggtc aatgtgacgg tggactacat tagaccagcc agcccagcca 360
cagagacagt gcctgccttt tcagagcgta cctgtgccac tgtcaccatt ggaggaataa 420
acattgctga ggctcttgct agcaaagggtc tagccacagt gatcagatac cggcaggatg 480
atgaccagag atcatcacac tacgatgaac tgct 514

```

```

<210> 618
<211> 456
<212> DNA
<213> Homo sapiens

```

```

<400> 618
gaattcggca cgagggggcg ggcaggcggg caggccggca ggcggtgctg cggagggctg 60
gtgccccgca gcaggtgggc ggggtgcggt tggcggcgcc ggctgggccc ggggctgccc 120
gctgcgctcg ggccgtgcgc ggcggccgtg cgggcacgcc atggacttca acatgaagaa 180
tctggcgctc gacgcgggca tcttcttcac ccgggcggtg cagttcacgg aggagaaatt 240
tgccagggct gagaagactg agcttgatgc ccactttgaa aaccttctgg cccgggcaga 300
cagcaccaaag aactggacag agaagatctt gaggcagaca gaggtgctgc tgcagcccaa 360
ccccagtgcc cgagtggagg agttcctgta tgagaagctg gacaggaagg tcccccaag 420
ggtcaccaac ggggagctgc tggtcagta catggc 456

```

```

<210> 619
<211> 262
<212> DNA
<213> Homo sapiens

```

```

<400> 619
gaattcggca cgaggcagaa gcccctagct cctctgagcc tcatggggcc agaggaagca 60
gtagttcggg cggaagaaa tgctacaagc tggagaatga gaagctgttc gaagagttcc 120
ttgaactttg taagatgcag acagcagacc accctgaggt ggtcccatc ctctataacc 180
ggcagcaacg tgcccactct ctgttttttg cctcggcgga gttctgcaac atcctctcta 240
gggtcctgtc tcgggcccgg ac 262

```

```

<210> 620
<211> 205
<212> DNA
<213> Homo sapiens

```

```

<400> 620
gaattcggca cgaggattta tgggccactg cacatgccc ctgcagccct gggatcagct 60
ggaagctgcc tgtcatctcc tgcccaatcc ccagaaaccc tgattcaggt ctgcaggctc 120
ctgcgggctc accaggctgc tggtcccggt accatgtaaa cctaggaagg taaaggagca 180
ggcaacctcc tcgtggcctg tgtgt 205

```

```

<210> 621
<211> 483
<212> DNA
<213> Homo sapiens

```

```

<400> 621
gaattcggca cgaggcctgg ccgggaccgt gtgggcccgt aggatgagga cggctgggag 60

```

```

acgcgagggg accgcaaggc ccggaagccc ctggtggaga agaagcggcg cgcgcggatc 120
aacgagagcc tgcaggagct gcggctgctg ctggcgggcg ccgaggtgca ggccaagctg 180
gagaacgccg aagtgtctga gctgacggtg cggcgggtcc aggggtgtgct gcggggcccg 240
gcgcgcgagc gcgagcagct gcaggcggaa gcgagcgaac gcttcgctgc cggctacatc 300
cagtgcctgc acgaggtgca cacgttcgtg tccacgtgcc aggccatcga cgctaccgtt 360
ctgccgagct cctgaaccat ctgctcgagt ccatgccgct gcgtgagggc agcaacttca 420
ggatctgctg ggggacgccc tgcggggcca cctaaatccc ctggacggaa tggctggctg 480
cgg                                     483

```

<210> 622

<211> 562

<212> DNA

<213> Homo sapiens

<400> 622

```

gaattcggca cgagggcgct gcgggtagga gccgggttgc gggagacccc aggttcggtt 60
gggattccca gccagaacgg agcttaagcc gggcaggcga gcgaatgacg gtagtagcag 120
ctgcacggcg gcgtgctgcg ctggttagga cgctgtcccg cgcgctccca ggccgccccg 180
aggcttgggg tcttcgaagg ataatcggcg cccggggccg aacagcgggg gcacacgggg 240
cgctgccgaa gtgcaaggcc acggccagag ctcgagcccc acgcgctgtc tggagtctga 300
ggttggcgcc gtttggggtc ggggtctgag gcttgggcgc tgcctgggcc gagcggagat 360
cggggtttgc ctcccgtccc cgctcaggac cctgacgtgg ctgaagcggc cccgggagca 420
tgagcggcag cgcgtggacg tcaaggtggt gatgctgggc aaggagtacg tgggcaagac 480
tagcctggtg gagcgctacg tgcacgaccg ctttctggtg gggccttacc agaacaccat 540
cggggcccgcc ttcgtggcca ag                                     562

```

<210> 623

<211> 645

<212> DNA

<213> Homo sapiens

<400> 623

```

gaattcggca cgaggtctgag agagagcaca gcctggtggg ttctgggggtc tacggcctag 60
gggcccggga agtttgcgcc gccgcgacca gtgctgcgat cccgagccgg gctccagccc 120
cgaggaccag gggctgggcg ggccctgcta cggaaacccc cgggccagca gcagtcgtct 180
cgcgtcctcc tgcttgaaa agtggttaag cttctaaaat gtcattctatc aagcacctgg 240
tttatgcagt tattcgtttc ttacgggaac aaagtcagat ggacacttac acctcggtatg 300
aacaagaaaag tttggaagtt gcaattcagt gcttggagac agtttttaag atcagcccag 360
aagatacaca cctagcagtt tcacagcctt tgacagaaat gtttaccagt tccttctgta 420
agaatgacgt tctgccccct tcaaaactcag tgcctgaaga tgtgggaaaa gctgaccaat 480
taaaagatga aggcaataac cacatgaaag aagaaaatta tgctgctgca gtggattggt 540
acacacaggc aatagaattg gatcccaata atgcagttta ctattgcaac agggctgctg 600
ctcagagcaa attaggtcac tacacagatg cgataaagga ttgtg                                     645

```

<210> 624

<211> 521

<212> DNA

<213> Homo sapiens

<400> 624

```

ctgagcgtct ctgcttagcc gcggtcatga gccggcacag ccggctgcag aggcaggttc 60
tgagcctgta ccgcgatctg ctgcgcgccg ggcgtgggaa gccgggcgcc gaggcgcgag 120
tgccggcaga gttccggcag catgcgggcc tgccgcggtc cgacgtgctg cgcacagagt 180
acctgtaccg ccgcgggcgg cgccagctgc agctgctacg ctccggccac gccaccgcca 240

```

```

tgggcgcctt cgtacgcccc cgggccccga cccgggagcc tggcggcgtg ggttcccagc 300
ctgacgacgg cgacagtcca aggaaccccc acgacagcac gggggcaccg gagacccgcc 360
ccgacggacg gtgacaggcg aagagccgaa ctcgctcgat ggcgtggtgg agccaggagg 420
ctcgcctgac tgcattgggg gactggggaa cccgcctaag gtgagaggtc ttaagagact 480
agcttgacga attggggatg tcagagactc ctccttggcg a 521

```

<210> 625

<211> 375

<212> DNA

<213> Homo sapiens

<400> 625

```

gaattcggca cgaggagaac atgcagtcta ggaaccggca tgcgcataac ctcaggatat 60
aaataatgct gaagcagagt tacgtttttt ttgttggtgt tttttttgtt tttgtttttt 120
taggtttccg tgtgtttcta ttgagctgct cagtgcccg cttagaagac caggaaaagg 180
agtcacaggt cgtatgctgg aggcttgagc cgcggcaccg tggcgcggct cgcctcgctg 240
cggttggtgg tggcgggtga cattgcagcg cggctggagg gggtccttag acaagggtgca 300
agacaaacag aagagggcat gtgggggtcaa actcctactg cctgcctgat tttctgccac 360
aggacaaatt cacca 375

```

<210> 626

<211> 628

<212> DNA

<213> Homo sapiens

<400> 626

```

gaattcggca cgaggaaaat ggttcgctat tcacttgacc cggagaaccc caccgaaatca 60
tgcaaatcaa gaggttccaa tcttcgtgtt cactttaaga acactcgtga aactgctcag 120
gccatcaagg gtatgcatat acgaaaagcc acgaagtatc tgaaagatgt cactttacag 180
aaacagtgtg taccattccg acgttacaat ggtggagtgt gcagggtgtg gcaggccaag 240
caatggggct ggacacaagg tcggtggccc aaaaagagtgt ctgaattttt gctgcacatg 300
cttaaaaacg cagagagtaa tgctgaactt aagggttttag atgtagattc tctggtcatt 360
gagcatatcc aagtgaacaa agcacctaag atgcgccgcc ggacctacag agctcatggt 420
cggattaacc catacatgag ctctccctgc cacattgaga tgatccttac ggaaaaggaa 480
cagattgttc ctaaacaga agaggaggtt gcccagaaga aaaagatatc ccagaagaaa 540
ctgaagaaac caaaacttat ggcacgggag taaattctca ttaaaataaa tgtaattaaa 600
aggaaaaaaa aaaaaaaaaa aactcgag 628

```

<210> 627

<211> 645

<212> DNA

<213> Homo sapiens

<400> 627

```

gaattcggca cgaggagaaa acgaagcagc gttggaaaat ggaattaaaa atgaggaaaa 60
cacagaacca ggtgctgaat cttctgagaa cgctgatgat cccaacaaaag atacaagtga 120
aaacgcagat ggtcaaagtgt atgagaacaa ggacgactat acaatcccag atgagtatag 180
aattggacca tatcagccca atgttccctgt tggatatagac tatgtgatac ctaaaacagg 240
gttttactgt aagctgtgtt cactctttta tacaaaatgaa gaagttgcaa agaatactca 300
ttgcagcagc cttcctcatt atcagaaaatt aaagaaattt ctgaataaat tggcagaaga 360
acgcagacag aagaaggaaa cttaagatgt gcaaggagat ttaatgattt caaagaaaat 420
aatggttctt tgtttttaat gttaaccttt tttaaataca atactgatag ttagaagaaa 480
actattgtac tcttttgttt tagtggagaa ataatagatg tctgttcatg tgttaagtgt 540
tatagcaaaa aaaatacaca tatggttaag ttaatgaata gtttttgttt tatcagaatg 600

```

gcaacagaca gaagtacttt gtagagattg acttcctaag ctctt

645

<210> 628

<211> 625

<212> DNA

<213> Homo sapiens

<400> 628

gaattcggca	cgaggggatt	cagcagcctc	ccccctgagc	cccctcgctt	cccgcagttc	60
cgttccccc	tgcccgcctt	ctcccgccac	cgccgcccgc	gccttcgcga	ggccggtttc	120
accgaggaaa	aggaatcgta	tcgtatgtcc	gctatccaga	acctccactc	tttcgacccc	180
tttgctgatg	caagtaaggg	tgatgacctg	cttcctgctg	gcactgagga	ttatatccat	240
ataagaattc	aacagagaaa	cggcaggaag	accttacta	ctgtccaagg	gatcgctgat	300
gattacgata	aaaagaaaact	agtgaaggcg	tttaagaaaa	agtttgccctg	caatgggtact	360
gtaattgagc	atccggaata	tggagaagta	attcagctac	aggggtgacca	acgcaagaac	420
atatgccagt	tcctcgtaga	gattggactg	gctaaggacg	atcagctgaa	ggttcatggg	480
ttttaagtgc	ttgtggctca	ctgaagctta	agtgaggatt	tccttgcaat	gagtagaatt	540
tcccttctct	tccttgtcac	aggtttaaaa	acctcacagc	ttgtataatg	taaccatttg	600
gggtccgctt	ttaacttggg	ctagt				625

<210> 629

<211> 545

<212> DNA

<213> Homo sapiens

<400> 629

gaattcggca	cgagggagcc	caggaggtca	aggctacagt	gagccgtgat	catgccactg	60
cactccagcc	tgggtgacag	agcgagaccc	tgtctcttaa	caacaaaaacc	catgagcggc	120
agccccccag	tcctggatgg	tggtaaagaa	tcctcaagat	caaaccacag	cagtgcctgag	180
agcttggcct	gattctaggg	ctggggctgg	agaaactgct	agagatgatg	ccgatagcca	240
gtgtgatccc	cctgccctga	tggtaaggg	cagagtgcag	actggaaccc	tcccctcccc	300
aaagattcag	acctgtgggg	ctgagtgggc	tcatagtgtc	cccaagtcct	gagaggctgg	360
tgtctggctt	cagcctccag	cttctcaggt	tctgatgcag	tcagctgagt	tccctgccta	420
ttcttgcaag	cactaggagg	aaggggtggg	ggttgctggg	aacagcaccg	agcgcctcc	480
ccaccagat	tcacagagca	cactccccgg	ggggatactt	taatccggag	gccgtgacgc	540
ctgct						545

<210> 630

<211> 605

<212> DNA

<213> Homo sapiens

<400> 630

gaattgggca	cgaggcgggc	cgcagctttt	cggttcacag	cgggcagggg	aagccgcggg	60
aagggtactc	caggcgagag	gcgagcgca	gtcgtcgtgg	caggaaaaagt	gactagctcc	120
ccttcgttgt	cagccagggg	cgagaacaca	gccacgtcc	caccgcgctg	ccaacgatcc	180
ctcggcggcg	atgtcggccg	ccggtgcccg	aggcctgcgg	gccacctacc	accggctcct	240
cgataaagtg	gagctgatgc	tgcccagaaa	attgagggcg	ttgtacaacc	atccagcagg	300
tcccagaaca	gtttttttct	gggctccaat	tatgaaatgg	gggttggtgt	gtgctggatt	360
ggctgatatg	gccagacctg	cagaaaaact	tagcacagct	caatctgctg	ttttgatggc	420
tacagggttt	atttgggtcaa	gatactcact	tgtaattatt	ccaaaaaatt	ggagtctgtt	480
tgctgttaat	ttctttgtgg	gggcagcagg	agcctctcag	ctttttcgta	tttggagata	540
taaccaagac	taaaagctaa	agcacacaaa	taaaagagtt	ctgatcacct	gaacaatcta	600
gatgt						605

<210> 631
 <211> 364
 <212> DNA
 <213> Homo sapiens

<400> 631
 gaattcggca cgaggcgac acgagaacat gcctctcgca aaggatctcc ttcattccctc 60
 tccagaagag gagaagagga aacacaagaa gaaacgcctg gtgcagagcc ccaattccta 120
 cttcatggat gtgaaatgcc caggatgcta taaaatcacc acggtcttta gccatgcaca 180
 aacggtagtt ttgtgtgttg gctgctccac tgcctctgc cagcctacag gaggaaaagc 240
 aaggcttaca gaaggatgtt ccttcaggag gaagcagcac taaaagcact ctgagtcaag 300
 atgagtggga aaccatctca ataaacacat tttggataaa aaaaaaaaaa aaaaaaaact 360
 cgag 364

<210> 632
 <211> 545
 <212> DNA
 <213> Homo sapiens

<400> 632
 gaattccggc acgaggggac ccagagagag cctgagcagc cccaccgccg ccgcggcct 60
 agttaccatc acaccccggg aggagccgca gctgccgag ccggccccag tcaccatcac 120
 cgcaaccatg agcagcgagg ccgagaccca gcagccgccg gccgcccccc ccgcggcccc 180
 cgccctcagc gccgcccaga ccaagcccg cactacgggc agcggcgag ggagcgggtg 240
 cccgggcggc ctacatcgg cggcgcctgc cggcggggac aagaaggta tcgcaacgaa 300
 ggttttgga acagtaaaat ggttcaatgt aaggaaaggga tatggtttca tcaacaggaa 360
 tgacaccaag gaagatgtat ttgtacacca gactgccata aagaagaata accccaggaa 420
 gtaccttcgc agtgtaggag atggagagac tgtggagttt gatgttgttg aaggagaaaa 480
 gggcgcgag gcagcaaatg ttacaggtcc tgggtggtgt ccagttcaag gcagtaata 540
 tgag 545

<210> 633
 <211> 506
 <212> DNA
 <213> Homo sapiens

<400> 633
 gaattcggca cgaggctggt cactccgcca ccgtagaatc gcctaccatt tgggtgcaagc 60
 aaaaagcaat cagcaattgg acaggaaaag aatggcattg aagcagattt ccagcaacaa 120
 gtgctttggg ggattgcaga aagtttttga acatgacagt gttgaactaa actgcaaaat 180
 gaaatttgct gtctacttac caccaaaggc agaaacagga aagtgccttg cactgtattg 240
 gctctcagg ttaacttgca cagagcaaaa ttttatatca aaatctggtt atcatcagtc 300
 tgcttcagaa catggctctt ttgtcattgc tccagatacc agccctcgtg gctgcaatat 360
 taaagggtgaa gatgagagct gggacttttg cactggtgct ggattttatg ttgatgccac 420
 tgaagatcct tggaaaacca actacagaat gtactcttat gtcacagagg agcttcccc 480
 actcataaat gccaattttc cagtgg 506

<210> 634
 <211> 485
 <212> DNA
 <213> Homo sapiens

<400> 634


```

gaattcggca cgagggagtt gtgggcccag gagccctgcg gctgccggca ggtgaactga 60
gtgcccagaca gctgagaccg gcgcccaccc gtccctgagca tagctctgta ggcagtgcgg 120
gcatagcctg catagtgtcc tggcgctggg agttccccgt ggacagagcc agagggcagt 180
ggcgctccct gtcagagctg gatcaggccc cccatcgagg agggagggca gacggaggcc 240
cgagagcctc cccaggcctc ttogtgggaa ggccccagta ccaactcgtag gaggtctcag 300
ctctggcatg gctgcccccg atgtggccga gggggcttca ccctgtgtcc ttaggagggg 360
gtggcccttga ggcaagagcc gtgcctcaact gacccccagg ggctcatcc tccccatgga 420
atgggctgta tgtcctgccc caacttggcc cgcagcaggc cagaccccc taccgccgcc 480
cagag                                         485

```

```

<210> 635
<211> 615
<212> DNA
<213> Homo sapiens

```

```

<400> 635
gaattcggca cgaggcttac aaggaaaatg ctgacttatg accggcgctc tgagcctcag 60
gttggggagc gagtgccata cgtcatcatt tatgggaccc ccggagtacc acttatccag 120
cttgtaaggc gccagtgga agtcctgcag gacccaactc tgagactgaa tgctacttac 180
tatattacca agcaaactct tccacccttg gcaagaatct tctcacttat tgggtattgat 240
gtcttcagct ggtatcatga attaccaagg atccataaag ctaccagctc ctgcggaagt 300
gaacctgaag ggcggaaaagg cactatttca caatatTTta ctaccttaca ctgtcctgtg 360
tgtgatgacc taactcagca tggcatctgt agtaaattgtc ggagccaacc tcagcatgtt 420
gcagtcaccc tcaaccaaga aatccgggag ttggaacgtc aacaggagca acttgtaaag 480
atatgcaaga actgtacagg ttgctttgat cgacacatcc catgtgtttc tctgaactgc 540
ccagtacttt tcaaactctt ccgagtaaat agagaattgt ccaaggcacc atatcttcgg 600
cagttattaa accag                                         615

```

```

<210> 636
<211> 504
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 12
<223> n = A,T,C or G

```

```

<400> 636
gaattcggca cnaggccaaa acctgtttgg gaagcatatt acagaaatga tttcaagtac 60
cctgtattct ggatgctaaa aaacaaaaaac aaacaaaaaa acaaaaacaa aaaaacaaaa 120
ccagaatcag gtaaaacagc tatgtgatta aaatatTTta attcttcagc aattacccgg 180
ttttctaaat tgaatcatgc atctatttat aattctaatt attttgtaaa agaagacaaa 240
attatgaatc ttaagtattt gctccatctt tttctctgta atgggtggaga ggctgcccat 300
aattcatctc cacatggagc caagtttaat gtttctagtt cacattttgt acttctgtca 360
tgcttatttc aaactccctg agtgatgggt aagaaatcaa acattgcctc agtggatatca 420
agagaacttt ggtgggtggt tcttcagaat catgaagttc ttttgccaga taaatatTTt 480
gatattattt tccttttttaa tata                                         504

```

```

<210> 637
<211> 449
<212> DNA
<213> Homo sapiens

```

<400> 637

```

gaattcggca cgagggtttaa accctgcgtg gcaatccctg acgcaccgcc gtgatgccca 60
gggaagacag ggcgacctgg aagtccaact acttccttaa gatcatccaa ctattggatg 120
attatccgaa atgtttcatt gtgggagcag acaatgtggg ctccaagcag atgcagcaga 180
tccgcatgtc ccttcgcggg aaggctgtgg tgctgatggg caagaacacc atgatgcgca 240
aggccatccg agggcacctg gaaaaacaacc cagctctgga gaaactgctg cctcatatcc 300
gggggaatgt gggctttgtg ttcaccaagg aggcctcac tgagatcagg gacatgttgc 360
tggccaataa ggtgccagct gctgccgtgc tggtgccatt gccccatgtg aagtcactgt 420
gccagcccag aacactggtc tcggggcccg

```

<210> 638

<211> 524

<212> DNA

<213> Homo sapiens

<400> 638

```

gaattcggca cgagggttga ttatggcaag aagtccaagc tggagttctc catttaccba 60
gcaccccagg tttccacagc tgtagttgag ccctacaact ccacccctac caccacaccc 120
accctggagc actctgattg tgccttcatt gtagacaatg aggccatcta tgacatctgt 180
cgtagaacac tcgatatcga gcgcccaccc tacactaacc ttaaccgcct tattagccag 240
attgtgtcct ccactactgc ttccctgaga tttgatggag ccctgaatgt tgacctgaca 300
gaattccaga ccaacctggt gccctacccc cgcattccact tccctctggc cacatatgcc 360
cctgtcatct ctgtgagaa agcctaccat gaacagcttt ctgtagcaga gatcaccaat 420
gcttgctttg agccagccaa ccagatggtg aaatgtgacc ctgcgcatgg taaatacatg 480
gcttgctgcc tgtgtaccg ttgtgacgtg gttcccaaag atgt

```

<210> 639

<211> 524

<212> DNA

<213> Homo sapiens

<400> 639

```

gaattcggca cgagggttgc tctactgagtg cctactttta tgtcctgcct gtggtgagca 60
caaatgttga gcacatcaat ccccatTTTT tagacgaaga gacagagttg agtgacttgc 120
ccaaagacac agggccagtg aggagttgtg caggtttgcc ctggcattaa aataataaac 180
attgaaattc agtcgattcc cctatggact cagttataga tctcatcagt tgaaggaga 240
gagatgcctt ttcctattca gcctttttgc aatccttcca tctagaggag atgtatctta 300
taatattctc aaaggcactc tgttgctaat agcagccttg atgaggctcc atatatctca 360
ttggaagcag agctagtctt ggaaactgaa aatgttggac cagagtctgc ccattccttt 420
agctctgggt ccagctgtgg tctggggtgg aatggagtct gaccttgcct cacacagggc 480
ctgtctgttc tcattgtggc catccacatc ctggagctgc tcat

```

<210> 640

<211> 524

<212> DNA

<213> Homo sapiens

<400> 640

```

gaattcggca cgaggggaga ctacaaggat agggccagga gtaatggagt ccaaagagaa 60
acgagcagta aacagtctca gcatggaaaa tgccaaccaa gaaaatgaag aaaaggagca 120
agttgctaata aaaggggagc ccttgccctt ccctttggat gctgggtgaat actgtgtgcc 180
tagaggaaat cgtaggcggg tccgcgttag gcagcccatc ctgcagtata gatgggatat 240
gatgcatagg cttggagaac cacaggcaag gatgagagaa gagaatatgg aaaggattgg 300
ggaggagggtg agacagctga tggaaaagct gagggaaaag cagttgagtc atagtctgcg 360

```

ggcagtcagc actgaccccc ctcacatga ccatcatgat gagttttgcc ttatgccctg 420
aatcctgatg gtttccctaa agttattacg gaaacagacc cctgctttcg aatttacatg 480
ttcatgatgt gcccttggtg taaaccttta cctgtcactt gttt 524

<210> 641
<211> 523
<212> DNA
<213> Homo sapiens

<400> 641
gaattcggca cgaggcctcg tgccgtgccc cccgaggtat gcgggggtcac tcgctgctcg 60
atgttccttc cgaagggtcg gacaaggctc cggagccctg tagctgccct ccctaggagc 120
cccgggtctt cactggccga ggtgcccacc ccgcagcatt ctgggagtg tagttttctt 180
ccttcaggtt cattcctggc tggccagtgc ccaagactgg cgagactacg attcccagac 240
gcccaagcga gtgcgccgtc acgtggccgc aaggacgctg ggccgggtggg cgggggcccgg 300
caggtgctcc gcagccgtct gtgccaccca gagccggcgg gccgctaggt ccccgagac 360
cctgctatgg tgctgctggg cgccgtgggg gctcatctcc ccgctcggg cttggatatc 420
ttcggggacc tgaagaagat gaaacaagcgc cagctctatt accaggtttt aaacttcgcc 480
atgatcgtgt cttctgcact catgatatgg aaaggcctga tcg 523

<210> 642
<211> 524
<212> DNA
<213> Homo sapiens

<400> 642
gaattcggca cgagggtgaa ggtgtgtgtc agcttttgcg tcaactgagc cctgggcgct 60
gcttgctaaa gagccgagca cgccgggtctg tcatcatgtc gcgttacggg cgggtacggag 120
gagaaaccaa ggtgtatgtt ggtaacctgg gaactggcgc tggcaaagga gagttagaaa 180
gggctttcag ttattatggt cctttaagaa ctgtatggat tgcgagaaat cctccaggat 240
ttgcctttgt ggaattcgaa gatcctagag atgcagaaga tgcagtacga ggactggatg 300
gaaaggtgat ttgtggctcc cgagtgaagg ttgaaactatc gacaggcatg cctcggagat 360
cacgttttga tagaccacct gcccagcgtc cctttgatcc aaatgataga tgctatgagt 420
gtggcgaaaaa gggacattat gcttatgatt gtcacgtta cagccggcga agaagaagca 480
ggtcacggtc tagatcacat tctcgatcca gaggaaggcg atac 524

<210> 643
<211> 523
<212> DNA
<213> Homo sapiens

<400> 643
gaattcggca cgaggggtaa caccagaata tttggcaaa ggagaaaaaa aaagcagcga 60
ggcttcgcct tccccctctc cctttttttt tcctcctctt ccttcctcct ccagccgccg 120
ccgaatcatg tcgatgagtc caaagcacac gactccgttc tcagtgtctg acatcttgag 180
tccccctggg gaaagctaca agaaagtggg catggagggc ggccggcctcg gggctccgct 240
ggcgcgctac aggcagggcc aggcggcacc gccaacagcg gccatgcagc agcacgccgt 300
ggggcaccac ggcgccgtca ccgcgccta ccacatgacg gcggcggggg tgccccagct 360
ctcgcactcc gccgtggggg gctactgcaa cggcaacctg ggcaacatga gcgagctgcc 420
gccgtaccag gacaccatga ggaacagcgc ctctggcccc ggatggtacg gcgccaaccc 480
agaccgcgcg tttcccccca gttctttttt ttcaggatca ggc 523

<210> 644
<211> 525

<212> DNA

<213> Homo sapiens

<400> 644

```

gaattcggca cgaggggaaaa ccagagatag aggggaaagcc agagagtga ggagagccag 60
ggagtgaaac aagggctgca ggaaagcgcc cagctgagga tgatgtaccc aggaaagcca 120
aaagaaaaac taataagggg ctggctcatt acctcaagga gtataaagag gccatacatg 180
atatgaattt cagcaatgag gacatgataa gagaatttga caatatggct aaggtgcagg 240
atgagaagag aaaaagcaaa cagaaattgg gggcgttttt gtggatgcaa agaaatttac 300
aggaccctt ctaccctaga ggtccaaggg aattcagggg tggctgcagg gccccacgaa 360
gggacattga agacattcct tatgtgtagt gtccctggca ggcatttacc aggccatgtg 420
ctttaacgtt cggtaatact ttactttagg catccctcct gttgctagca gccttttgac 480
ctatctgcaa tgcagtgttc tcagtaggaa atgttcatct gttac 525

```

<210> 645

<211> 358

<212> DNA

<213> Homo sapiens

<400> 645

```

gaattcggca cgaggggggtg gtggagcgct gggcggccag gctccctggc tggccggttt 60
gggctgtctg gccgtgaagg tgggacctcc tgttccgggc cgcaagtttc cctctccagc 120
cgcccgccgt tcgtagcatg tccccagaa ctcggggagc gcaggcagga caggcttaga 180
gaagacgcgg tccccagcgc ttgggccacg gacgtccac cccgctcctc tgctgctgga 240
gaaccgccgg gccgagccac tgggagaagc aggccagagc cttccagggc ctccggcccg 300
tggacccgag gaggatgagc tggctttttc ccctgaccaa gagcgccctc tcctccgc 358

```

<210> 646

<211> 420

<212> DNA

<213> Homo sapiens

<400> 646

```

gaattcggca cgaggcgctt cttcgcacac tgtgattttg ccctcctgcc cagcgagacc 60
tgcagcgggc aaagagctcc cgaggaagca cagcttgggt caggttcttg cctttcttaa 120
ttttagggac agctaccgga aggaggggaa caaggagttc tcttccgcag cccctttccc 180
cacgcccacc cccagtctcc agggaccctt gcctgcctcc taggttgga gccatgggtc 240
cgaagtgtag ggcaagggtg cctcaggacc ttttggctct cagcctccct cagccccag 300
gatctgggtt aggtggccgt cctcctgctc ctcatgggaa gatgtctcag agccttcatg 360
acctcccctc cccaacccaa tgccaaagtg gacttgggag ctgcacaaag tcagcaggga 420

```

<210> 647

<211> 518

<212> DNA

<213> Homo sapiens

<400> 647

```

gaattcggca cgagggetgc cggaggggtcg ttttaaaggg cccgcgcgtt gccgccccct 60
cgccccgcca tgctgctatc cgtgccgctg ctgctcgccc tcctcgccct ggccgtcgcc 120
gagcctgccg tctacttcaa ggagcagttt ctggacggag acgggtggac ttcccgtgg 180
atcgaatcca aacacaagtc agattttggc aaattcgttc tcagttccgg caagtcttac 240
ggtgacgagg agaaagataa aggtttgcag acaagccagg atgcacgctt ttatgctctg 300
tcggccagtt tcgagccttt cagcaacaaa ggccagacgc tgggtggtgca gttcacggtg 360
aaacatgagc agaacatcga ctgtgggggc ggctatgtga agctgtttcc taatagtttg 420

```

gaccagacag acatgcacgg agactcagaa tacaacatca tgtttggtcc cgacatctgt 480
ggcctgcacc aaaaagggtc atgtcatctt caactaca 518

<210> 648
<211> 561
<212> DNA
<213> Homo sapiens

<400> 648
gaattcggca cgagggtccg cttgaccgag atgctgcggg cctgtcagtt atcgggtggg 60
acccccgcc ccccaaagt gctctgtggg aagtttgtcc tccgtccatt gcgaccatgc 120
cgcaaaaact ctacttttagg cagctctggg ttgactactg gcaaaattgc tggagctggc 180
cttttgtttg ttggtggagg tattggtggc actatcctat atgccaaatg ggattcccat 240
ttccgggaaa gtgtagagaa aaccatacct tactcagaca aactcttcga gatgggtctt 300
ggtcctgcag cttataatgt tccattgcc aagaaatcga ttcagtcggg tccactaaaa 360
atctctagt tatcagaagt aatgaaagaa tctaaacagc ctgcctcaca actccaaaaa 420
caaaaggagg atactccagc ttcagcaaca gcagggtgata ccctgtcggg cccagcccct 480
gcagttcagc ctgaggaatc tttaaaaact gatcaccctg aaattggtga aggaaaaccc 540
acacctgcac tttcagaaga a 561

<210> 649
<211> 428
<212> DNA
<213> Homo sapiens

<400> 649
gaattcggca cgaggctgag gtggcagata gtgagcgctg gtggcggagt taaagtcaaa 60
gcaggagagt aattatgaat agcgcagcgg gattctcaca cctagaccgt cgcgagcggg 120
ttctcaagtt aggggagagt ttcgagaaac accgcgcgtt gcgccttcca cactgtgcgc 180
tatgacttca aacctgcttc tattgacact tcttctgaag gataccttga ggttggtgaa 240
ggtgaacagg tgaccataac tctgccaat atagaagggt caactccacc agtaactgtt 300
ttcaaagggt caaaaaacct tacttaaaag aatgcatttt gattattaac catgatactg 360
gagaatgtcg gctagaaaaa ctcagcagca acatcactgt aaaaaaaca agagttgaag 420
gaagcagt 428

<210> 650
<211> 428
<212> DNA
<213> Homo sapiens

<400> 650
gaattcggca cgagggagggt gtcgggcgtg gccggcgact gaggggtcgg gctggctctt 60
gagggcccag gccctggccg acgcgcccgc cgtgagcgag gagggccgaa tccgggcgtc 120
tttggttggg ttgcgggccc aggcgcgcgc gccggggtcg ggaggcgtgg caggtggccc 180
gacagccttc tttgacctct gggaaagctg acttattcct atggctttgc ttctagggct 240
ttcttaggcc tctttgccgg ctgcctgggc agcccgcgag gtgggctgga gtaactgat 300
aaaagtatat ggtggaatcg ggcctactag gtacccctag tagtagggaa ggggtgtatt 360
agaccgagag ggaatgttta caactagcgt tacagtttaa tatttgaaaa tccaaagcgg 420
aagactgg 428

<210> 651
<211> 341
<212> DNA
<213> Homo sapiens

<400> 651

```

gaattcggca cgagggccgg gccgtgggtg acacgtaagt tgggcaggag gtggcggggc 60
ggcagaggca ccagccgacc cgtcagtgac accgctgtgc cgtcccaaaa accagccgag 120
acagctggcc cccacccttc caccattgg gcaggccgca cgggggcgcg gcccgagtc 180
ctggtccctt tgttgggcgc gcaccccttc ccttaggtgg caacaaagtc gtgcagtggt 240
agccgcccgc atagggcggg gagtggccag ggccggactc caagaactgc ccgggggcag 300
cggggccaaa aagtgggaag aaggaaaaaa ggcaggaggc a 341

```

<210> 652

<211> 669

<212> DNA

<213> Homo sapiens

<400> 652

```

gaattcggca cgagggaaaa tttgtgctct ggagagaact gttaaagctc tagaatttgt 60
tcaaactgaa tctcaaaaag atttggaat aaccaaagaa aatctggctc aagcagttga 120
acaccgcaaa aaggcacaag cagaattagc tagcttcaaa gtcctgctag atgacactca 180
aagtgaagca gcaagggtcc tagcagacaa tctcaagttg aaaaaggaac ttcagtcaaa 240
taaagaatca gttaaaagcc agatgaaaca aaaggatgaa gatcttgagc gaagactgga 300
acaggcagaa gagaagcacc tgaaagagaa gaagaatatg caagagaaac tggatgcttt 360
gcgcagagaa aaagtccact tggaaagagac aattggagag attcaggtta ctttgaacaa 420
gaaagacaag gaagttcagc aacttcagga aaacttgagc agtactgtga cccagcttgc 480
agcctttact aagagcatgt cttccctcca ggatgatcgt gacagggtga tagatgaagc 540
taagaaatgg gagaggaagt ttagtgatgc gattcaaagc aaagaagaag aaattagact 600
caaagaagat aattgcagtg gtctaaagga tcaacttaaa cagatgtcat tcatatggaa 660
gaattaaga 669

```

<210> 653

<211> 322

<212> DNA

<213> Homo sapiens

<400> 653

```

gaattcggca cgaggcttgc ttctgtggaa caatgccaca gtgaccacct gccactccaa 60
gactgcccac ctggatgagg aggtaaataa aggtgacatc ctggtggttg caactgggtca 120
gcctgaaatg gttaaagggg agtggatcaa acctggggca atagtcacgc actgtggaat 180
caattatgtc ccagatgata aaaaacccaa tgggagaaaa gttgtgggtg atgtggcata 240
cgacgaggcc aaagagaggg cgagcttcat cactcctgtt cctggcggcg tagggcccat 300
gacagttgca atgctcatgc ag 322

```

<210> 654

<211> 332

<212> DNA

<213> Homo sapiens

<400> 654

```

gaattcggca cgagggcggg aagcagctct tgtggatcct cagtggcgga ggctcggtca 60
cccggatagg taaaggaaaa catgcctgcc acacggaagc caatgagata tgggcataca 120
gaggacaca cggaggctctg ttttgatgat tctgggagtt ttattgtgac ttgtggaagt 180
gatggtgatg tgaggatttg ggaagacttg gatgatgatg atcctaagtt cattaatgtt 240
ggagaaaagg catattcatg tgctttgaag agtggaaaaac tggtcactgc agttttctaat 300
aatactattc aagtccacac atttcctgaa gg 332

```

<210> 655
 <211> 573
 <212> DNA
 <213> Homo sapiens

<400> 655
 gaattcggca cgaggaaata aggtgaattt gggacaaatg aaagggtgaga tgaaggcaaa 60
 ctactgtcaa gggatgatct gagcctgaac aactcagtga atgtgaagag aaaacaagat 120
 tacatgtgaa tatagatggt aactggaaaa gcaaggagaa aaaaaggag cacaaggag 180
 aaaaaaaaaat caaaatttgt gagccatctc aagccatcaa aaaaacttca ttctattgta 240
 ggagggaagc tggaaacaat ggcagagtaa ttttgtgtta agaattaaag tactagctcc 300
 agttaggcat ataaatgaca attagaaggg acagaagtta tggttatgtc agcagcctcc 360
 agtgagctag gatataaact aagtcttttc aagctgaaca aatatataca cattcaaccc 420
 atttaagtga agagacacat ttaagtccac aaaagcaaac ttaactacct actatataac 480
 ttacttttita ttgaaagtat cttgcattca tgatggatgc tttctgggtt ttaccacata 540
 ttttaatggt aaaagttaaa ttattcttta cat 573

<210> 656
 <211> 462
 <212> DNA
 <213> Homo sapiens

<400> 656
 gaattcggca cgaggaaaga acttgaggga caggctgata ggtgcggcaa accaccatag 60
 tacacatata cctatgtaac aaacctccac attctgcaca tgtgtcccag aacttaaagt 120
 aaaattttaa aaaaaagaaa agaaatatcc agaaagatta tccagcctca aggtttatat 180
 tataatggct ataaacaaca aaacataaac ctattttcca aaggtttcca aatatactac 240
 cgaagaaaca aacataaaaa acgactttga tatttctaaa aagcataact taaaatttaa 300
 aaaaaaagtt aatgaaaaaa caaacactca atggttactg cttacttta agaaaaaac 360
 atttagttaa gcacattttc ccccaaagct atttaaacac caagattcag aagtaaacct 420
 tatttagatg agtttctagt caacgaattg acctacataa tc 462

<210> 657
 <211> 383
 <212> DNA
 <213> Homo sapiens

<400> 657
 gaattcggca cgagggaaga gaggagagct ggagcaggag gaggagcggc tctccaagga 60
 gtgggaggac tccaaacgct ggagcaagat ggaccagctg gccaaaggagc tgacggctga 120
 gaagcggctg gaggggcagg aggaggagga ggacaaccgg gacagttcca tgaagctctc 180
 cttccgggcc cgggcctacg gcttcagggg ccctgggccg cagctgcgac gaggctggag 240
 gccatcctcc cgggaggaca agccttgagg cgggcctgcc ctccaggctc gaggctaccc 300
 cgaggagaag aaagaggagg agggcagcgc aaaccgcaga ccagaggacc aggagctgga 360
 ggcctgtcgc gccattgagg cag 383

<210> 658
 <211> 540
 <212> DNA
 <213> Homo sapiens

<400> 658
 gaattcggca cgaggtttcg agtcagtgcg gccgccgctg cccgcggctt tgcaagcag 60
 gatgaatgtg atagaccacg tgcgggacat ggccggccgc gggctgcact ccaacgtgcg 120

```

gctcctcagc agcttggttac ttacaatgag taataacaac cctgagttat tctccccacc 180
tcagaagtac cagcttttgg tgtatcatgc agattctctc ttcatgata aggaatatcg 240
gaatgctgtg agtaagtata ccatggcttt acagcagaag aaagcgctaa gtaaaacttc 300
aaaagtgaga ccttcaactg gaaattctgc atctactcca caaagtcagt gtcttccatc 360
tgaaattgaa gtgaaatata aaatggctga atgttatata atgctaaaac aagataaaga 420
tgccattgct atacttgatg ggatcccttc aagacaaaga actcccaaaa taaacatgat 480
gctggcaaac ctgtcaagaa ggctggctcag gagcgccctt cagtcaccag ctataaggag 540

```

<210> 659

<211> 366

<212> DNA

<213> Homo sapiens

<400> 659

```

gaattcggca cgaggcttca aactcacacc tcccgggagg agctgtcctg gcgcggggtc 60
ccgcggggaa aatggtggag ccagggcaag atttactgct tgctgctttg agtgagagtg 120
gaattagctc gaatgacctc tttgatattg atggtggaga tgcagggtt gcaactccaa 180
tgctacccc gtcagttcag cagcagcagc ctccatctac tacaacattt gtgctgaatc 240
aaataaatca tcttccaccc ttgggatcta caattgtaat gactaaaaca ccacctgtaa 300
caaccaacag gcaaaaccat cactttaact aagtttatcc agactactgc aagccacgcc 360
ccgtca

```

<210> 660

<211> 514

<212> DNA

<213> Homo sapiens

<400> 660

```

gaattcggca cgaggaggaa gaaaagcact agcaacttca aagccgacgg cctgtccggc 60
actgctgaag aacaagaaga aaattttgag tttatcattg tgtccctcac tggccaaaca 120
tggaactttt gaagccacga cgtatgagga gcgggacgct gggccaagc catcgagagc 180
cagatcctgg ccagcctgca gtcgtgcgag agcagcaaga acaagtcocg gctgacgagc 240
cagagcggag ccatggccct gcagtcgac cggaaacatgc gcgggaactc ccactgtgtg 300
gactgcgaga cccagaatcc caactgggcc agtttgaact tgggagccct catgtgcac 360
gaatgctcag ggatccaccg gaatcttggc acccaccttt cccgagtcog atctctggac 420
ctggatgact ggccaatcga gctcatcaag gtgatgtcat ccatcgggaa cgagctagcc 480
aacagcgtct gggaagagag cagccagggg cgga

```

<210> 661

<211> 515

<212> DNA

<213> Homo sapiens

<400> 661

```

gaattcggca cgaggcggag tcaaggtgga cgcgagagac cacagtggag ccacagcccg 60
gatgctggcc aagcagtacg gacacatgaa gatcgtggcc ttgatggaca cttactcgcc 120
ctctctgccc aagagcctct atcggagccc agaaaagtac gaagatctga gctcttctga 180
cgagtcctgc cctgtcctc agagacagag gccttgccgg aagaagggtg tcagcatcca 240
cgagggaccg cgagccctgg ccaggatcac aggcattggc ctgggcggca gagccccacg 300
gctctgctat gacgaggtc ctccccgtgg ctatgtcacc ttcaacagca gtggcgagaa 360
ccccctggaa gaagagggcc tctgctgccc ggatgtcacc tccccatca atgagcgagg 420
cgtggagagc agcagcagca gcagcagtcg ggaggaacat gctttctgtg ccaacctggg 480
gcccgtccag agcagcagca gcagcagggg cctgg

```


<210> 662
 <211> 570
 <212> DNA
 <213> Homo sapiens

<400> 662
 gaattcggca cgagggcggt ggcggcgccc gggcggaact ttccagaacg actactgagt 60
 gagaggtcgg aggagcggtg actaccccgg ctgcgcacag ctgcggcgtc cttcccgtc 120
 cctcacacac cggcctcagc ccgcaccggc agtagaagat ggtgaaagaa acaacttact 180
 acgatgtttt ggggggtcaaa cccaatgcta ctgaggaaga attgaaaaag gcttatagga 240
 aactggcctt gaagtaccat cctgataaga acccaaataa aggagagaag tttaaacaga 300
 tttctcaagc ttacgaagtt ctctctgatg caaagaaaag ggaattatat gacaaaggag 360
 gagaacaggc aattaaagag ggtggagcag gtggcggttt tggctcccc atggacatct 420
 ttgatatgtt ttttgaggga ggaggaagga tgcagagaga aaggagaggt aaaaatgttg 480
 tacatcagct ctgagtaacc ctagaagact tatataatgg tgcaacaaag aaaactggct 540
 ctgcaaaaaga atgtgatttg tgacaaatgt 570

<210> 663
 <211> 307
 <212> DNA
 <213> Homo sapiens

<400> 663
 gaattcggca cgagggcgcg gaggggctgg ctgggcagga ggggttggcg gggcagcagg 60
 gccgcggcca tggggagctt gaaggaggag ctgctcaaag ccatctggca cgccttcacc 120
 gcaactcgacc aggaccacag cggcaaggct tccaagtccc agctcaagggt cctttcccat 180
 aacctgtgca cgggtgctgaa ggttcctcat gaccaggttg cccttgaaga gcacttcagg 240
 gatgatgatg aggggtccagt gtccaaccag ggctacatgc cttattttaa caggttcatt 300
 ttggaag 307

<210> 664
 <211> 496
 <212> DNA
 <213> Homo sapiens

<400> 664
 gaattcggca cgagggcggg ccgaggagat tggcgacggt gtcgcccgtg ttttcgttgg 60
 cgggtgcctg ggctggtggg aacagccgcc cgaaggaaag accatgattt cggccgcgca 120
 gttgttggat gagttaatgg gccgggaccg aaacctagcc ccggacgaga agcgcagcaa 180
 cgtgcggtgg gaccacgaga gcgtttgtaa atattatctc tgtgggtttt gtctgcgga 240
 attgttcaca aatacacgtt ctgatcttgg tccgtgtgaa aaaattcatg atgaaaatct 300
 acgaaaacag tatgagaaga gctctcggtt catgaaagt ggctatgaga gagatttttt 360
 gcgatactta cagagcttac ttgcagaagt agaacgtagg atcagacgag gccatgctcg 420
 tttggcatta tctcaaaacc agcagtcctc tggggccgct ggcccaacag gcaaaaaaaa 480
 aaaaaaaaaa ctcgag 496

<210> 665
 <211> 517
 <212> DNA
 <213> Homo sapiens

<400> 665
 gaattcggca cgaggggact cgcgagagag gactcacgga cctccaggac ctattaactt 60
 gacagaccgg cccctctatt cgagccagcc caactcgag aactcagagt catcctcgag 120

```

agtaaagaaa gctcttagag tttttttttt tttgacaaat ctatcttaaa tgtcagtcca 180
atatccacgg cgacgagcca cagcaggtga gaaacctgga aatgagcctg aagaggtgaa 240
gctgcagaat gccagcaaac agattgtgca gaatgcaatc ctgcaagctg tgcagcaagt 300
ctcccaggag agtcagcgca gagaagagag aatcagtgac aaccgggacc acatccaact 360
gggcgttggg gagttaacca agaagcacga aaagaagtaa catggtggat ttggctcttg 420
acatgtgctt ggtttctagc cttcctctta gtataggacg catctcccaa atgttgccag 480
taaagcaaac ccgaagtggc acccggccct aacttgt 517

```

<210> 666

<211> 616

<212> DNA

<213> Homo sapiens

<400> 666

```

gaattcggca cgagggggccg ctcttgcct tctcccgc tttcttctc tctccttgcg 60
gtctgaagat gccctcggcc accagccaca gcgggagcgg cagcaagtcg tccggaccgc 120
caccgcgctc gggttcctcc gggagtggg cggccgcggg agccggggcc gccgcgccgg 180
cttctcagca ccccgcaacc ggcaccggcg ctgtccagac cgaggccatg aagcagattc 240
tcgggggtgat cgacaagaaa cttcggaacc tggagaagaa aaagggtaa cttgatgatt 300
accaggaacg aatgaacaaa ggggaaagcg ttaatacaaga tcagctggat gccgtttcta 360
agtcaccagga agtcacaaat aatttggagt ttgcaaaaga attacagagg agtttcatgg 420
cactaagtca agatattcag aaaacaataa agaagacagc acgtcgggag cagcttatga 480
gagaagaagc tgaacagaaa cgtttaaaaa ctgtacttga gctacagtat gttttggaca 540
aattgggaga tgatgaaagt gcggacttga cctgaaacaa ggggtgaatg ggagtggcaa 600
tattgtccga agagga 616

```

<210> 667

<211> 596

<212> DNA

<213> Homo sapiens

<400> 667

```

gaattcggca cgaggggaaaa ttagtgctct ggagagaact gttaaagctc tagaatttgt 60
tcaaactgaa tctcaaaaag atttggaaat aaccaaagaa aatctggctc aagcagttga 120
acaccgcaaa aaggcacaag cagaattagc tagcttcaaa gtcctgctag atgacactca 180
aagtgaagca gcaagggtcc tagcagacaa tctcaagttg aaaaaggaa cttcagctcaa 240
taaagaatca gttaaaagcc agatgaaaca aaaggatgaa gatcttgagc gaagactgga 300
acaggcagaa gagaagcacc tgaaagagaa gaagaatatg caagagaaac tggatgcttt 360
gcgcagagaa aaagtccact tggaagagac aattggagag attcaggtta ctttgaacaa 420
gaaagacaag gaagttcagc aacttcagga aaacttgac agtactgtga cccagcttgc 480
agcctttact aagagcatgt cttccctcca ggatgatcgt gacagggtga tagatgaagc 540
taagaaatgg gagaggaagt ttagtgatgc gattcaaagc aaagaagaag aaatta 596

```

<210> 668

<211> 297

<212> DNA

<213> Homo sapiens

<400> 668

```

gaattcggca cgaggggaaa caccatggct gcggcggccc agctctctct gacacagtta 60
tcaagtggga atcctgtata tgaaaaatac tatagacagg ttgatacagg caatactgga 120
agggtgttgg cttctgatgc tgctgctttc ctgaaaaaat cagggttcc agacttgata 180
cttggaagaa tttgggattt agccgacaca gatggcaaag gtatcctgaa caaacaagaa 240
ttctttgttg ctttgcgtct tgtggcatgt gcccagaatg gattggaagt ttacta 297

```

<210> 669
 <211> 458
 <212> DNA
 <213> Homo sapiens

<400> 669
 ggcacgaggg atcggtcgcc tgagaggtat cacctcttct gggctcaaga tggacaacaa 60
 gaagcgccctg gcctacgcca tcatccagtt cctgcatgac cagctccggc acgggggcct 120
 ctcgtccgat gctcaggaga gcttggaagt cgccatccag tgccctggaga ctgcgtttgg 180
 ggtgacggta gaagacagtg accttgcgct ccctcagact ctgccggaga tatttgaagc 240
 ggctgccacg ggcaaggaga tgccgcagga cctgaggagc cccgcgcgaa ccccgccctt 300
 cgaggaggac tcagcagagg cagagcgccct caaaaaccgaa ggaaacgagc agatgaaagt 360
 ggaaaacttt gaagctgccg tgcatttcta cggaaaagcc atcgagctca acccagccaa 420
 cgccgtctat ttctgcaaca gagccgcagc ctacagca 458

<210> 670
 <211> 634
 <212> DNA
 <213> Homo sapiens

<400> 670
 gaattcggca cgaggctcag ctgacaagga ctggggacgg cgggtgtcctt gtcttgccctt 60
 tgtgcccccc gccctctctt tccctggctg gacttgcgga gtccccgccg aagaaccgca 120
 ggagccatat attgaagacc atgtctggaa gcttctactt tgtaattggt ggtcaccatg 180
 ataatccagt ttttgaaatg gagtttttgc cagctgggaa ggcagaatcc aaagacgacc 240
 atogtcatct gaaccagttc atagctcatg ctgctctcga cctcgtagat gagaacatgt 300
 ggctgtcgaa caacatgtac ttgaaaactg tggacaagtt caacgagtgg tttgtgtcaa 360
 catttgtcac cgcggggcat atgaggggta ttatgcttca tgacataaga caagaagatg 420
 gaataaagaa cttctttact gatgggttat atttatatat aaaattttca atgaatccat 480
 tttatgaacc caattcttct attcgatcaa gtgcatttga cagaaaagtt caatttcttg 540
 ggaagaaacc cttttaaagc tgaatggaga aaattccaaa taaattatat caccaccatg 600
 gtgtatactc aaaaaaaaaa aaaaaaaact cgag 634

<210> 671
 <211> 517
 <212> DNA
 <213> Homo sapiens

<400> 671
 gaattcggca cgaggcaaag gcgtatctca gatgcccttg agatatggaa tgaaccacaca 60
 tcagacccct gccagctgt acacactgca gcccaagctt cccatcacag ttctaaatgg 120
 agcccctgga tttataaact tgtgcgatgc tttgaacgcc tggcagctgg tgaaggaaact 180
 caaggaggct ttaggtattc cagccgctgc ctctttcaaa catgtcagcc cagcaggtgc 240
 tgctgttgga attccactca gtgaagatga ggccaaagtc tgcattggtt atgatctcta 300
 taaaaccctc acacccatct cagcggcata tgcaagagca agaggggctg ataggatgtc 360
 ttcatgttgt gattttgttg cattgtccga tgtttgtgat gtaccaactg caaaaattat 420
 ttccagagaa gtatctgatg gtataattgc cccaggatat gaagaagaag ccttgacaat 480
 actttccaaa aagaaaaatg gaaactattg tgtcctt 517

<210> 672
 <211> 516
 <212> DNA
 <213> Homo sapiens

<400> 672

```

aattcggcac gaggggtttaa acagatttct caagcttacg aagttctctc tgatgcaaag 60
aaaagggaat tatatgacaa aggaggagaa caggcaatta aagagggagg agcaggtggc 120
ggttttggct ccccatgga catctttgat atgttttttg gaggaggagg aaggatgcag 180
agagaaagga gaggtaaaaa tgtgtacat cagctctcag taaccctaga agacttatat 240
aatggtgcaa caagaaaact ggctctgcaa aagaatgtga tttgtgacaa atgtgaaggt 300
agaggaggta agaaaggagc agtagagtgc tgtcccaatt gccgaggtag tggaaatgcaa 360
ataagaattc atcagatagg acctggaatg gttcagcaaa ttcagtctgt gtgcatggag 420
tgccagggcc atggggagcg gatcagtcct aaagatagat gtaaaagctg caacggaagg 480
aagatagttc gagagaagaa aattttaaaa gtcat 516

```

<210> 673

<211> 516

<212> DNA

<213> Homo sapiens

<400> 673

```

aattcggcac gaggaacgag actgtgtctc aaaaaaatcc agaagcttta tcccaggtct 60
actggacttc ctagaacacc aagaaaggaa agggaattcg cctgtcatga tttagaatca 120
tgggggaata ttgtactacc caaataatga gtgacaaaaa ggtacctcct tgtttttaag 180
ccacaacttg aagcagttag caaggaggtc tattttgggt agaaagttgg tgggttccat 240
tttcaacatg tgattcaaat tacttaatac aggtctgggac agggagaatg tgagcagctg 300
atattccagc tgagattagg ggtccatttg tagagatggg tccagaagac caaaactatg 360
gaaagaatga cagggtcaaa gtggaggagc tgccggggac atccagcagt cagagaatgt 420
ctgaattgaa aacatggcca agcgcagtag ctcaccttg taatccccac actttggggag 480
accaaagcag aaggatccct tgaggccagg agttca 516

```

<210> 674

<211> 516

<212> DNA

<213> Homo sapiens

<400> 674

```

gaattcggca cgaggcttga gtgacgatgt ccctatcagg gactatcgca tcgatgagaa 60
gaactttgtg gtggtcatgg tgaccaagac caaagccggc cagggtacct cagcaccccc 120
agaggcctca cccacagctg cccagagtc ctctacatcc ttccgcctg cccacctca 180
ggcatgtccc atccccacc tgccgccaga gaggacaaga gccatcaga ggaatccgcc 240
cccacgacgt cccagagtc tgtgtcaggc tctgttcctt cttcaggtag cagcgggcga 300
gaggaagacg cggcctccac gctagtgcag ggctctgagt atgagacgat gctgacggag 360
atcatgtcca tgggctatga gcgagagcgg gtcgtggccg cctgagagcc agctacaaca 420
acccccaccg agccgtggag tatctgctca cgggaattcc tgggagcccc gagccggaac 480
acggttctgt ccaggagagc caggtatcgg agcagc 516

```

<210> 675

<211> 406

<212> DNA

<213> Homo sapiens

<400> 675

```

cctcgtgccg aattcggcac gaggatcagt ttaaaacagt gcctgggctc ccagccctcc 60
actcacttcc ctgttctctg catgggtgat actgagaggt tgggaggcat aggaaggggg 120
aagatcctag ggagtatatg tgagcattga ctatatgcag agggttttag tgggtgctcg 180
tagaaatggt tggaggcgga tagaaaatat ttttagaaga gcatcctccc aatgttctct 240

```

```

cctttttttc tggatggaag atgtttttgt gccagaaatc agattgatac ccaaagttag 300
atttccagtt tactccacag gtcccctaata ttttaaggat catcactctt gttctttttc 360
taatcagtta gtagtgctat tcctgatcac tgggaagtgc tgttgt 406

```

<210> 676

<211> 529

<212> DNA

<213> Homo sapiens

<400> 676

```

gaattcggca cgaggacat ttcctggcat tgaagaaaaa tttaggcctt tttattttaag 60
tcaattagaa gaaagtgtag aagaggacgt gaagagttaa aagaaagagt attcaaacga 120
aaaatgcagt tgtgaagaga atgcagtctc ttcacttgat tgtgtggcag taccttcaag 180
ccggtcaaata tcagccacag aacagcctgg ttcacttgca cagttcccag ggacttggga 240
tgggtcctgt ggaggagtcc tggtttgctc cttccctgga gcaccacaa gaagagaatg 300
agcccagcct gcagagtaaa ctccaagacg aagccactac catctttatg gcagccgat 360
ggacaggcag acgaaacagc agcccagaca gaatgtggct tacaacagag aggaggaaaag 420
gagacgcagg gtctcccatg acccttttgc acagcaaaga ccttacgaag aattttcaga 480
atacagaggg aaaaggcctg gttattccag tgcagccagt catggtaat 529

```

<210> 677

<211> 528

<212> DNA

<213> Homo sapiens

<400> 677

```

tggatccaaa gaattcggca cgaggcctct atctcctaga tgacaggatc tatgcaacta 60
acccagagat gacacagaga tgaatgagat gtggctcctg tcatcaagga gctcatgatt 120
caatggggaa ctaacactta gatgcatggg cagttaggga catgcaagaa tctttgtaat 180
gcaacaagag agaagttaca aggcagcacg gaagtcaatg ccggtgaacc cagatggcct 240
ggtgagagga gcctggacta gaaggaatta ctctcacttc caccacccga tgtatggaaa 300
ctgctatact ttcaatgaca agaacaactc caacctctgg atgtcttcca tgcttggaaat 360
caacaacggg ctgtccctga tgcctgcgcg aaagcagaat gacttcattc ccctgctgtc 420
cacagtgaat ggggcccggg taatggtgca cgggcaggat gaacctgcct ttatggatga 480
tggtggcctt aacttgccgc ctggcgtgga gacctccatc agcatgag 528

```

<210> 678

<211> 528

<212> DNA

<213> Homo sapiens

<400> 678

```

gtggatccaa agaattcggc acgaggctgg acaggcgggt gtgaggagt gtagacccaa 60
acccacgtgc attttgggac aattgctttt taaaacgttt ttatgccaaa aatccttcat 120
tgtgattttc agaaccacgt cagatatacc aagtgactgt gtgtggggtt tgacaactgt 180
ggaaaggcga gcagaaaact ccggcggctc gaggccatgg agtggttgc tgcatattgag 240
agggagttag gggctagatg tggctcctag tgcaaaccgg aaacctggc acctccaga 300
gccgtggtct caaggagtca gagcagggtc ggccctcagt agctgcaggg agctttgatg 360
caacttattt gtaagaagga tttttaaatt ttttatgggt agaattgtag tcaggaaaac 420
agaaagggtc tgaaatttaa taagtgtgct tggaaggga ttttccaagc ctggaagggt 480
attcagcagc tgtgtgtggg aaacatttct cctgaaagac tgaacgtg 528

```

<210> 679

<211> 309

<212> DNA

<213> Homo sapiens

<400> 679

```

gaattcggca cgaggggcaag atgggtcacc agcagctgta ctggagccac ccgcgaaaaat 60
tcggccaggg ttctcgctct tgtcgtgtct gttcaaacgc gcacgggtctg atccggaaaat 120
atggcctcaa tatgtgccgc cagtgtttcc gtcagtacgc gaaggatata ggtttcatta 180
agttggacta aatgctcttc cttcagagga ttatccgggg catctactca atgaaaaaac 240
atgataattc tttgtatata aaataaacat ttgaaaaaac ctttcaaaaa aaaaaaaaaa 300
aaactcgag                                     309

```

<210> 680

<211> 366

<212> DNA

<213> Homo sapiens

<400> 680

```

gaattcggca cgagggcgggc cgttatccat ttgtgttgtt cgccagctag gcctggcctc 60
gtcccgccttc gctcgggtcgg tctcgcgcgc ccccatagcc ttgctagagg gttagcgtaa 120
gccttaaaagt gtgcgaatcc cgaaggaaagc aagcgacaga actcgaagaa ccaccgcttc 180
ctttccttcg gggaaaggaa ggcgggcacc ctcgcgtttt gaaaggcccc gcccttgccg 240
ttttggaagg ccccgccctt gcgctttgcg ggccccgcct tgcgctttga aggccttgct 300
ttgccgtttt gaaaatctca tttggggccg tggattgaag gaattttggg ggaagggttt 360
tggggc                                     366

```

<210> 681

<211> 495

<212> DNA

<213> Homo sapiens

<400> 681

```

gaattcggca cgagggcgcg agccggccgg gagaggctcg gacccccagg acctccagcc 60
tttagacctt ccggccctag gacccccgga acctgggacc cccgagacct cagcactcgc 120
ggcgggggga tggatcatgg gacttctggg gcttgaagac cctgggtctg cgggaagccc 180
ctgctgagcg tccctcgcct acccgtggc cagtggcttt tcagtgcaga aaccacctta 240
tctatgtgac aaagctcggg ccattcagtg caaggtagat tggcatcacg tacctttgat 300
acaacaacct gagaaggacg tcaattctgc gatattcctg ccaaaaatgc atctccgcac 360
tccgatcgtg agaacatcct gggcacaccc aaactgagag acaccataca aagtgactgg 420
tcagtgcact caaaggcaaa aagctcatgg aaggcaacag aagacaggag aagtgcacgc 480
taaaagcagc gtgga                                     495

```

<210> 682

<211> 529

<212> DNA

<213> Homo sapiens

<400> 682

```

gaattcggca cgaggggtgaa acagccgttt gagtttggct gcgggtggag aacgtttgtc 60
aggggcccgg ccaagaagga ggcccgcctg ttacgatggg gtccatgagt ttcaagcggg 120
accgcagtga ccggttctac agcaccgcgt gctgcggctg ttgccatgtc cgcaccggga 180
cgatcatcct ggggacctgg tacatggtag taaacctatt gatggcaatt ttgctgactg 240
tggaagtgac tcatccaaac tccatgccag ctgtcaacat tcagtatgaa gtcacgggta 300
attactattc gtctgagaga atggctgata atgcctgtgt tctttttgcc gctctgttct 360
tatgtttata atcagttcaa tgctggttta tggagcaatt tcttatcaag tgggttggct 420

```

gattccattc ttctgttacc gactttttga cttcgtcctc agttgcctgg ttgctattag 480
 ttctctcacc tatttgccaa gaatcaaaga atatctggat caactacct 529

<210> 683
 <211> 527
 <212> DNA
 <213> Homo sapiens

<400> 683
 gaattcggca cgagggaaca ccatgccttc aattaagttg cagagttctg atggagagat 60
 atttgaagtt gatgtggaat ttgccaaaca atctgtgact attaagacca tgttgaaga 120
 tttgggaatg gatgatgaag gagatgatga cccagttcct ctaccaaag tgaatgcagc 180
 aatattaaaa aaggtcattc agtgggtgcac ccaccacaag gatgaccctc ctcctcctga 240
 agatgatgag aacaaagaaa agcgaacaga tgatatccct gtttgggacc aagaattcct 300
 gaagttgcca aggaacactt ttttgactca ttctggctgc aaactactta gacatcaaag 360
 gtttgcttga tgtacatgca agactgttgc caatatgatc aaggggaaaa ctcctgagga 420
 gattcgcaag accttcaata tcaaaaatga ctttctgaag aggaggaacc cagtcgcaaa 480
 gagaccagtg ggtgaagaga agtgaatgtt gtgctgcact gtacctg 527

<210> 684
 <211> 441
 <212> DNA
 <213> Homo sapiens

<400> 684
 ctcgagtttt tttttttttt ttttatagta caaacttagg gctctttatt caggcagtaa 60
 agtaagggaac agcaaagtgg gagggctaca ccatcaccat ggcaacagaa agcctcaaaa 120
 acataaagtc cctcgactta tgtcgggtag actcttccta gctcaggaga aacacatttt 180
 aactggctga ggacaaggcc aggcagcctg gccacactgc ggaagggcag ctggacgcgc 240
 ggcctctggt cagtcctgga agtgccttgt gagggcttcc agcagctcct gcttcttcag 300
 cccactcttc agcccgtaa cccggcaggc ctctttcagc atgggcacag tgaacttgcc 360
 cagcgtaccc ttgctgatgt gggctctcag ctctcttct gaatactcca ccttgggcct 420
 tttgcttcca gaaccttcat t 441

<210> 685
 <211> 490
 <212> DNA
 <213> Homo sapiens

<400> 685
 aagaattcgg cagcaggccg agctgaagtt cgaaccact atgatcccc tcgaaagctc 60
 atggctatgc agcggccagg tccctatggt ggagggtatg gaggctatga tgactatggt 120
 ggctataatg atggatatgg ctttgggtct gatagatttg gaagagacct caattactgt 180
 ttttcaggaa tgtctgatca tagatacgga gatggtgggt ccagtttcca gagcaccaca 240
 gggcactgtg tacacatgag ggggttacct tacagagcca ctgagaatga tatttataat 300
 ttcttctcac ctcttaatcc catgagagta catattgaaa ttggacccga tggcagagtt 360
 accggtgagg cagatgttga atttgctact catgaagatg ctgtggcagc tatggcaaaa 420
 gacaaagcta atatgcacac agatatgtgg agctcttctt aaattctctg caggaacaag 480
 tgggggtgct 490

<210> 686
 <211> 618
 <212> DNA
 <213> Homo sapiens

<400> 686

```

gaattcggca cgaggctttt ttattctgtg aatgtttttg tttttattat gaaatatatt 60
aaaattgaaa agtacagaga ataatcgggtg tctactgtaa caccaccaga ttttaacaatg 120
ttaatgttac gccatatattg ttccaaatat ttttgtaata ttgaacatta tggatagagt 180
taaagcttgt ttgtatccat cccgttggtt acattctcca tcccctacat aggtaaccac 240
tattctgaag ttgatgtgta ttctttgtgt acatgctttt ataccttttc tgcataatgta 300
tgtatccata aataatatgt agtctgttgt gtgtttttta actttacaca gtggatgtcg 360
tactcttaca tgtattctgc agcttgcat tttcacacat tcattttgaa tattcgttca 420
tgtaacaat gtagatctag ttttcttttt aaactctgta tagtattctt atgtatgaca 480
tacacttgtt gttatacatt tgaattattt ccagggtattc ttttttgtgt gtggatgta 540
aagtcacgat ggcagagatt tttgaaggaa gataaattat tttaggatta catttacagc 600
gcaggccac ttcaaggt 618

```

<210> 687

<211> 410

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 396

<223> n = A,T,C or G

<400> 687

```

gggatcaga ggctggtgag gttggccctg ttgcagcatc tgcgggcctt ctatggtatt 60
aagggtgaagg gtgtccgtgg gcagtgcgat cgcaggagac atgaaacagc agccacggaa 120
atagggggta aaatatattg agtacctttt aatgcactgc cccattctgc tgtaccagaa 180
tatggacaca ttccaagctt tcttgctgat gcttgacat ctttagaaga ccatattcat 240
accgaagggc tttttcggaa atcaggatct gtgattcgcc taaaacacta aagaataaag 300
tggatcatgg ggaaggttgc ctatctctgc acctccttgg gatattgagg gacttcttaa 360
gcagtttttt agggactgcc agagcccat ctccnctga tttgcatgaa 410

```

<210> 688

<211> 412

<212> DNA

<213> Homo sapiens

<400> 688

```

ggccggtgca gcgggggggc ccggggggccc tgggtggccct gggatgggga accgcggtgg 60
cttcgcgga ggtttcggca gtggcatccg gggccggggt cgcggccgtg gacggggccg 120
ggcccgaggc cgcggagctc gcggaggcaa ggccgaggat aaggagtga tgcccgctac 180
caagttgggc cgcttggtca aggacatgaa gatcaagtcc ctggaggaga tctatctctt 240
ctccctgccc attaaggaat cagagatcat tgatttcttc ctgggggcct ctctcaagga 300
tgaggttttg aagattatgc cagtgcagaa gcagaccgt gccggccagc gcaccaggtt 360
caaggcattt gttgctatcg gggactacaa tggccacgtc ggtctgggtg tt 412

```

<210> 689

<211> 412

<212> DNA

<213> Homo sapiens

<400> 689


```

gccttgctaa cgctgccgtc ggggaggatt gatgtccctt cagcatcatg cagccccgcc 60
ccgaggaagg tgaaggttac acaagaactg aaaaacattc aagttgagca gatgacaaaa 120
cttcaagcca aacatcaagc agaatgtgat ttgcttgaag atatgaggac attcagtcag 180
aagaaggctg ctattgaaag agagtatgca caggggatgc agaagttggc tagtcaatac 240
ctgaagagag attggcctgg agtaaaagct gatgatcgga atgattacag gagcatgtat 300
cccgtttgga aatcttttct cgaggggaaca atgcaggtag cccagtctcg gatgaatata 360
tgtgaaaact ataaaaactt catttctgac ctgcaaggac agtgagaagc tt 412

```

<210> 690

<211> 412

<212> DNA

<213> Homo sapiens

<400> 690

```

gggcggcccc gcgcggggct ctcatagtgc tggagggcgt ggaccgcgcc gggaagagca 60
cgagagcccg caagctgggt gaagcgctgt gcgcgcggcg ccaccgcgcc gaactgctcc 120
ggttcccggg aagatcaact gaaatcggca aacttctgag ttctacttg caaaagaaaa 180
gtgacgtgga ggatcactcg gtgcacctgc ttttttctgc aaatcgctgg gaacaagtgc 240
cgttaattaa ggaaaagttg agccaggcgc tgaccctcgt cgtggacaga tacgcatttt 300
ctgggtgtggc cttcaccggt gccaaaggaga atttttccct agactgggtg aaacagccag 360
acgtgggcct tcccaaaccg gacctggtcc tgttcctcca gttacagctg gc 412

```

<210> 691

<211> 412

<212> DNA

<213> Homo sapiens

<400> 691

```

gggttttcac cttgaaaaac agtaagaaat atgctcccac cgaggcacag ttgaatgctg 60
ttgatgcttt gattgactcc atgagcttgg caaagaaaaga tgagaagaca gacacccttg 120
aagacttggt tccaaccacc aaaatcccaa atcctcgatt tcagagatta ttccagtgtc 180
tgctgcacag agctttacat ccccgggagc ctctaccccc aattcagcag catatttgga 240
atatgtgaa tcttcccgtg gaggtgacaa cgaaaagtca gattcctctc tctaaaataa 300
agaccctttt tctctgatt gaagccaaga aaaaggatca agtgactgct caggaaattt 360
tccaagacaa ccatgaagat ggacctacag ctaaaaaatt aaaaactgag ca 412

```

<210> 692

<211> 412

<212> DNA

<213> Homo sapiens

<400> 692

```

gcttggttgt ggatcgctgt gatcgctcact tgacaatgca gatcttcgtg aagactctga 60
ctggtgaagac catcaccctc gaggttgagc ccagtgcac catcgagaat gtcaaggcaa 120
agatccaaga taaggaaggc atccctcctg accagcagag gctgatcttt gctggaaaac 180
agctggaaga tgggcgcacc ctgtctgact acaacatcca gaaagagtcc accctgcacc 240
tgggtctccg tctcagaggt gggatgcaaa tcttcgtgaa gacactcact ggcaagacca 300
tcacccttga ggtggagccc agtgacacca tcgagaacgt caaagcaaag atccaggaca 360
aggaaggcat tcttcctgac cagcagaggt tgatctttgc cggaaagcag ct 412

```

<210> 693

<211> 413

<212> DNA

<213> Homo sapiens

```

<400> 693
ggtgaatggt agtgttgcca ccctgtgctg aggcctgagg cctcttcctc agctttatct 60
ccctttcctt cactcaaggg ccatttcccc agtccctatc tcccccatcc cctcccggct 120
tataggcccc acagggtgcta tttgttgctg tggcccaggc gtggggctac caagcaaagg 180
cttggcatat accaaaggcc aagctgcatg cccattaatc tgggcttttt tcttttgctg 240
gtcaatgtgg gttttaatgc tgaatcaaat gtttaacttt tccaagactt gggggaatct 300
gaagttccca tctacacttc taccactttt tctgcccaca cctaaacctt cgtttaagta 360
attggaaggg actggttccc ttctttttgt tggaagggaa ccaggaagga aag 413

```

<210> 694

<211> 441

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 100,138,202,203,211,237,287

<223> n = A,T,C or G

```

<400> 694
actagtggat ccaaagagag agagagagag agagagagag agagagagag agagagagag 60
agagagagag agagaggcgc ccgaggcgcg gaggggctgn ctgggcagga ggggttggcg 120
gggcagcagg gccgcggnca tggggagctt gaaggaggag ctgctcaaag ccattctggca 180
cgccttcacc gcactcgacc annaccacag nggcgaggtc tccaagtccc agctcanggt 240
cctttcccat aacctgtgca cgggtgctgaa ggttcctcgt gaccanttg cccttgaaga 300
gcacttcagg gatgatgatg agggctccagt gtccaaccag ggctacatgc cttattttaa 360
caggttcatt ttggaaaagg tccaagacaa ctttgacaag attgaattca ataggatgtg 420
ttgggaccct ctgtgtcaaa a 441

```

<210> 695

<211> 413

<212> DNA

<213> Homo sapiens

```

<400> 695
gctcgtctcc cgcgggcccag cgctcgcacc accgcttctc cctccctgtc gcagccgcgc 60
cgccgcgcag cgcccagcc acacgcggc ggcagaagc cgcccgtct cgggaaagtg 120
ataacagaat tcattgaagt ggagaatttt taaagaaggt aacaaaaaga gaaagaaaat 180
gccgaaacca atcaacgtaa gagtaactac aatggatgct gagctggaat ttgccattca 240
gcccataaca actggcaaac aactttttga ccagggtggtg aaaacagttg gtttgctgta 300
ggtctggttt tttgggctgc agtatgtaga cagcaaaggt tattctacat ggcttaaact 360
aaataaaaaa gtaacacagc aggatgttaa aaaagagaat cctttacagt tca 413

```

<210> 696

<211> 399

<212> DNA

<213> Homo sapiens

```

<400> 696
ggcttgatgg tcgaggccat ctctggggc gcctggcgcc catcgtggct aaacagggtac 60
tgctgggccc gaaggtggtg gtcgtacgct gtgaaggcat caacatttct ggcaatttct 120
acagaaacaa gttgaagtac ctggctttcc tccgcaagcg gatgaacacc aacccttccc 180
gaggccccta ccacttcgag gccccagcc gcattctctg gcggaccgtg cgagggtatgc 240

```

tgccccacaa aaccaagcga ggccaggccg ctctggaccg tctcaagggtg tttgacggca 300
 tcccaccgcc ctacgacaag aaaaagcga tggtggttcc tgctgccctc aaggctcgtgc 360
 gtctgaagcc tacaagaaaag tttgcctatc tggggcgcc 399

<210> 697
 <211> 398
 <212> DNA
 <213> Homo sapiens

<400> 697
 gcagtagctg ggtgggcacc atggctggga tcaccaccat cgaggcgggtg aagcgcaaga 60
 tccaggttct gcagcagcag gcagatgatg cagaggagcg agctgagcgc ctccagcgag 120
 aagttgaggg agaaaggcgg gcccggaac aggtgagggc tgaggtggcc tccttgaacc 180
 gtaggatcca gctggttgaa gaagagctgg accgtgctca ggagcgcctg gccactgccc 240
 tgcaaaagct ggaagaagct gaaaaagctg ctgatgagag tgagagaggt atgaagggtta 300
 ttgaaaaccg ggccttaaaa gatgaagaaa agatggaact ccaggaaatc caactcaaag 360
 aagctaagca cattgcagaa gaggcagata ggaagtat 398

<210> 698
 <211> 396
 <212> DNA
 <213> Homo sapiens

<400> 698
 gaactcaaaa gtggaaaata tgtacaatct gtaatgagct ttttctgaa aatgtctata 60
 gtgtgcactt cgaaaaagaa cataaagctg agaaagtccc agcagtagcc aactacatta 120
 tgaaaataca caattttact agcaaatgcc tctactgtaa tcgctattta cccacagata 180
 ctctgctcaa ccatatgtta attcatggtc tgtcttgtcc atattgccgt tcaactttca 240
 atgatgtgga aaagatggcc gcacacatgc ggatggttca cattgatgaa gagatgggac 300
 ctaaaacaga ttctactttg agttttgatt tgacattgca gcagggtagt cacactaaca 360
 tccatctcct ggtaactaca tacaatctga gggatg 396

<210> 699
 <211> 398
 <212> DNA
 <213> Homo sapiens

<400> 699
 ggccactgca gtgctcgagc cccgtgcagg ggagcttgcg ggaggatcga ccgacagacg 60
 gacgcacgcc gaggcactgc gccccagcc ccgcgcgggt gccaccgcag cccgaccccg 120
 gccgccagtc cagccgcccc tcgcccgggtg cctaggtgcc cggccccaca ccgccagctg 180
 ctcggcgccc ggggtccgcca tgcgctccgc cgctgtcctg gctcttctgc tctgcgccgg 240
 gcaagtcaact gcgctccctg tgaacagccc tatgaataaa ggggataccg aggtgatgaa 300
 atgcatcggt gaggtcatct ccgacacact ttccaagccc agccccatgc ctgtcagcca 360
 ggaatgtttt gagacactcc gaggagatga acggatcc 398

<210> 700
 <211> 399
 <212> DNA
 <213> Homo sapiens

<400> 700
 gcctgaatcc cctgcaaacc ccagaggagc tcggcctgcg ctgcgccacg atgtccgggg 60
 agtcagccag gagcttgggg aagggaagcg cgccccggg gccggtccc gagggctcga 120

tccgcatcta cagcatgagg ttctgcccgt ttgctgagag gacgcgtcta gtcctgaagg 180
 ccaagggaaat caggcatgaa gtcacatgaa tcaacctgaa aaataagcct gactgggttct 240
 ttaagaaaaa tcccttttgt ctgggtgccag ttctggaaaa cagtcagggt cagctgatct 300
 acgagtctgc catcacctgt gactacctgg atgaagcata ccaggggaag aagctgttgc 360
 cggatgaccc ctatgagaaa gcttgccaga agatgatct 399

<210> 701

<211> 399

<212> DNA

<213> Homo sapiens

<400> 701

gatctcattg ccacgcgccc ccgacgaccg cccgacgtgc attcccgatt ccttttggtt 60
 ccaagtccaa tatggcaact cttaaaggatc agctgattta taatcttcta aaggaagaac 120
 agacccccca gaataagatt acagttgttg gggttgggtg tgttggcatg gcctgtgcca 180
 tcagtatctt aatgaaggac ttggcagatg aacttgctct tgttgatgtc atcgaagaca 240
 aattgaaggg agagatgatg gatctccaac atggcagcct tttccttaga acaccaaaga 300
 ttgtctcttg caaagactat aatgtaactg caaactccaa gctgggtcatt atcacggctg 360
 gggcacgtca gcaagaggga gaaagccgtc ttaatttgg 399

<210> 702

<211> 398

<212> DNA

<213> Homo sapiens

<400> 702

gccacagcgg gagcggcagc aagtcgtccg gaccgccacc gccgtcgggt tectccggga 60
 gtgaggcggc cgcgggagcc ggggccgccc gcgcggcttc tcagcaccac gcaaccggca 120
 ccggcgctgt ccagaccgag gccatgaagc agattctcgg ggtgatcgac aagaaacttc 180
 ggaacctgga gaagaaaaag ggtaagcttg atgattacca ggaacgaatg aacaaagggg 240
 aaaggcttaa tcaagatcag ctggatgccg tttctaagta ccaggaagtc acaaataatt 300
 tggagtttgc aaaagaatta cagaggagtt tcatggcact aagtcaagat attcagaaaa 360
 caataaagaa gacagcacgt cgggagcagc ttatgaga 398

<210> 703

<211> 403

<212> DNA

<213> Homo sapiens

<400> 703

ggttacaaaa gttgaagtgc agaagttctt tgcagacttt cttcttgctg aggatgacat 60
 ttacttgctt tatgatgaca aaggtgttgg tctgggagaa gcattagtga aatttaaatt 120
 agaagaacag gccatgaaag ctgaacgttt aaaccgacga agattcctag ggacagaggt 180
 gttattaaga cttatatctg aggcacaaat acaggagttt ggtgtaaatt tttctgtgat 240
 gtccagtga aaaaatgcaag ctgcgtcaca gtcacgtgag cgaggtgacc attcccattt 300
 atttgactca aaagacccac caatatactc agttggtgct ttgaaaact ttagacatca 360
 gctagaggac ttgaggcaac tggataactt caagcatccc cag 403

<210> 704

<211> 411

<212> DNA

<213> Homo sapiens

<400> 704

```

cacgaggcca aagcccgcg cccgctgcat cccggtcca gcacctacgt cccgctgccg 60
tcgccggcgc caccatgccc aagagaaagg ctgaagggga tgctaaggga gataaagcaa 120
aggtgaagga cgaaccacag agaagatccg cgaggttgtc tgctaaacct gctcctccaa 180
agccagagcc caagcctaaa aaggcccctg caaagaaggg agagaaggta cccaaaggga 240
aaaagggaag agctgatgct ggcaaggagg ggaataaacc tgcagaaaat ggagatgcca 300
aaacagacca ggcacagaaa gctgaagggt ctggagatgc caagtgaagt gtgtgcattt 360
ttgataactg tgtacttctg gtgactgtac agtttgaaat actatTTTTT a 411

```

<210> 705

<211> 203

<212> DNA

<213> Homo sapiens

<400> 705

```

gagaacgtcc actgcgggccc ggcgaaagct ggttccttgt ggagaagcac tgggtataagc 60
agtgggaggc atacgtgcag ggaggggacc aggaactccag caccttcccc ggctcatctg 120
gcgccccagc ctccccctgc tgcagctccc caccagctc tgagttcatg gatgttaatt 180
gagagccctg ggtcctgcc cag 203

```

<210> 706

<211> 402

<212> DNA

<213> Homo sapiens

<400> 706

```

gtgtgggcag gcagggtagg tggccccccc agttcactcc cacgctgggg acctgcagag 60
ctggctgtcc gagacagggt gtttggacca acatctgggt ttctggattt ccatttgagc 120
acagctggac tacacaggct gaagctctct ctgccgagat atagatatTT ccctggtgat 180
gatctttcaa gctgacatga agacatggcc acccactgga acgtcgtgtg tctgccgtgg 240
cgctcttgta atttgtgagg gaggtccctg acgaatgcag tgcgtaagtg ggaaatgggt 300
ggaagtcttc gcatcccccc gcttggccga aagtgtctgc tgcgcagatt tgtggatggT 360
cctttgagca ggaagaagac acggaacaca ttctgttag ct 402

```

<210> 707

<211> 411

<212> DNA

<213> Homo sapiens

<400> 707

```

gcacgaggca cgactgttac agaggtctcc agagccttct ctctcctgtg caaaatggca 60
actcttaagg aaaaactcat tgcaccagtt gcggaagaag aggcaacagt tccaaacaat 120
aagatcactg tagtgggtgt tggacaagtt ggtatggcgt gtgctatcag cattctggga 180
aagtctctgg ctgatgaact tgctcttggt gatgttttgg aagataagct taaaggagaa 240
atgatggatc tgcagcatgg gagcttattt cttcagacac ctaaaattgt ggcatataaa 300
gattattctg tgaccgcaa ttctaagatt gtagtggtaa ctgcaggagt ccgtcagcaa 360
gaaggggaga gtcgggctcaa tctgggtgcag agaaatgtta atgtcttcaa a 411

```

<210> 708

<211> 418

<212> DNA

<213> Homo sapiens

<400> 708

```

ggcaggccga gcaggccgct gccgagaaac gccaccgtga ggagctggag cagagcaagc 60

```

```

aggccgctgg gggactgctg gcagagctgc tgcggggccca gcgggagctt ggggagctga 120
ttcctctgct gcagaaggtg gcagagcagg agcgaacagc tcagcagctg cgggcagaga 180
aggccagcta tgcagagcag ctgagcatgc tgaagaaggc gcatggcctg ctggcagagg 240
agaaccgggg gctgggtgag cgggcccaacc ttggccggca gtttctggaa gtggagttgg 300
accaggcccg ggagaagtat gtccaagagt tggcagccgt acgtgctgat gctgagacct 360
gtctggctga ggtgcagcga gaagcacaga gcactgcccg ggagctggag gtgatgac 418

```

<210> 709

<211> 422

<212> DNA

<213> Homo sapiens

<400> 709

```

gcggagtcgg cgggtggtcgt ccagaccgag tgttctttac tttttgtttg gttgaggttt 60
cacgctagaa ggtggctcag gatgtcttca tcacattttg ccagtcgaca caggaaggat 120
ataagtactg aaatgattag aactaaaatt gctcatagga aatcactgtc tcagaaagaa 180
aatagacata aggaatacga acgaaataga cactttgggt tgaaagatgt aaacattcca 240
accttggaa gtagaattct tgttgaatta gatgagacat ctcaagggtc tgttccagaa 300
aagaccaatg ttaagccaag ggcaatgaaa actattctag gtgatcaacg aaaacagatg 360
ctccaaaaat acaaagaaga aaagcaactt caaaaattga aagagcagag agagaaagct 420
aa 422

```

<210> 710

<211> 424

<212> DNA

<213> Homo sapiens

<400> 710

```

gcgccgacgc cgtaccgctg cggccggggg attgggcccgg ggtctccacc gccgaccgag 60
gggagcgggc tccgctcggc cctgcttttt gcgacctggc cgtcagcccc acgtcgccgg 120
cctggagggg cgaagaggac gagggggcca aggcttcctc cggggacatt ggctccctgg 180
attatcaaga gttttagtt gacattgaat ccaggctgag gatggaagggt gtggaactta 240
aagaagaatg gcaagatgaa gattttccga tacctttacc agaagatgat agtattgaag 300
cagatatact agctataact ggaccagagg accagcctgg ctactagaa gttaatggaa 360
ataaagttag aaagaaacta atgggtccag acattagcct gacactggat cctagtgatg 420
gctc 424

```

<210> 711

<211> 425

<212> DNA

<213> Homo sapiens

<400> 711

```

gctcgcgcc cttttcttac actttcctct tctccccgac cggaggagcc gctctttccg 60
cgcggtgcat tctggggccc gaggtcgagc ccgccgctgc cgccgtcgcc tgagggaagc 120
gagaagaggc cgcgaccgga gagaaaaagc ggagtcgcca ccggagagaa gtcgactccc 180
tagcagcagc cgccgccaga gagggccgcc caccagttcg cccgtccccc tgccccgttc 240
acaatgcagc ctgcttctgc aaagtgggtac gatcgaaggg actatgtctt cattgaattt 300
tgtgttgaag acagtaagga tgttaatgta aattttgaaa aatccaaact tacattcagt 360
tgtctcggag gaagtataa ttttaagcat ttaaatgaaa ttgatctttt tctactgtatt 420
gatcc 425

```

<210> 712

<211> 425

<212> DNA
<213> Homo sapiens

<400> 712

```

ggtttttccg tgattctgat gagctcaaga gttgggtcaa tgagaagatg aaaactgcc 60
cagatgaagc ttataaagat ccatccaacc tacaaggaaa agtacagaag catcaggctt 120
ttgaggctga gctctcagca aaccagagcc gaattgatgc cttggagaaa gctggccaaa 180
agctgattga tgtcaaccac tatgccaaagg atgaagtggc agctcgtatg aatgagggtga 240
tcagtttttg gaagaaactg ctagaggcca ctgaactgaa aggaataaag cttcgtgaag 300
ccaaccagca acagcaattt aatcgcaatg ttgaggatat tgaattgtgg ctatatgaag 360
tagaagggtca cttggcttcg gatgattacg gcaaagatct taccaatgtg cagaacctcc 420
agaag                                         425

```

<210> 713
<211> 423
<212> DNA
<213> Homo sapiens

<400> 713

```

gccgacaaaa tggacatgtc tctggacgac atcattaaac tgaaccggag ccagcgaggc 60
ggccggggcg ggggcccggg ccgcggccgg gccggctccc agggcgggccg cggcggtggg 120
gcgcaggccg ccgcgcgagt gaatcgaggc ggccggccca tccggaaccg gccggccatc 180
gcccgcggcg cggcggcgcg agggcgccagg aaccgaccgg cgccctacag caggccaaaa 240
caacttcccg acaagtggca gcacgatctt ttcgacagtg gcttcggcgg tggtgccggc 300
gtggagacag gtgggaaact gctgggtgtc aatctggatt ttggagtctc agacgccgat 360
attcaggaac tctttgctga atttggaacg ctgaataagg cggctgtgca ctatgatcgc 420
tct                                         423

```

<210> 714
<211> 425
<212> DNA
<213> Homo sapiens

<400> 714

```

gcggcagtag aagatggtga aagaaacaac ttactacgat gttttggggg tcaaacccaa 60
tgctactcag gaagaattga aaaaggctta taggaaactg gccttgaagt accatcctga 120
taagaaccca aatgaaggag agaagtttaa acagatttct caagcttacg aagttctctc 180
tgatgcaaag aaaagggaat tatatgacaa aggaggagaa caggcaatta aagaggggtg 240
agcagggtggc ggttttggct ccccatgga catctttgat atgttttttg gaggaggagg 300
aaggatgcag agagaaagga gaggtaaaaa tggtgtacat cagctctcag taaccctaga 360
agacttatat aatggtgcaa caagaaaact ggctctgcaa aagaatgtga tttgtgacaa 420
atgtg                                         425

```

<210> 715
<211> 423
<212> DNA
<213> Homo sapiens

<400> 715

```

gatcatatag taaaaccag cccatgacct ctaacagggg ccctctcagc cctcctaattg 60
acctccggcc tagccatgtg atttcacttc cactccataa cgctcctcat actaggccta 120
ctaaccaaca cactaaccat ataccaatga tggcgcgatg taacacgaga aagcacatac 180
caaggccacc acacaccacc tgtccaaaaa ggccttcgat acgggataat cctatttatt 240
acctcagaag tttttttctt cgcaggattt ttctgagcct tttaccactc cagcctagcc 300

```

cctaccccc aattaggagg gcactggccc ccaacaggca tcaccccgct aaatccccta 360
 gaagtcccac tcctaaacac atccgtatta ctgcgcatcag gagtatcaat cacctgagct 420
 cac 423

<210> 716
 <211> 424
 <212> DNA
 <213> Homo sapiens

<400> 716
 gcggcgggcg ggagagacgc agcggagggtt ttcctggttt cggaccccag cggccggatg 60
 gtgaaatcct ccctgcagcg gatcctcaat agccactgct tcgccagaga gaaggaaggg 120
 gataaaccca gcgccaccat ccacgccagc cgcaccatgc cgctcctaag cctgcacagc 180
 cgcggcgggca gcagcagtga gagttccagg gtctccctcc actgctgtag taacccgggt 240
 ccggggcctc ggtggtgctc ctgatgcccc tcaccacccc ctgaagatcc caggtgggag 300
 agggaatagt cagagggatc acaatctttc agctaaacta ttctactccg atgatcggct 360
 gaatgtaaca gaggaactaa cgtccaacga caagacgagg attctcaacg tcagtccagg 420
 ctca 424

<210> 717
 <211> 424
 <212> DNA
 <213> Homo sapiens

<400> 717
 gggcagctag ggagcgcggc ttgaggaggg cggggccgcc ccgcaggccc gccagtgtcc 60
 tcagctgcct ccgcgcgcca aagtcaaacc ccgacacccg ccggcggggc ggtgagctca 120
 ctactgacc cggcagggtca ggatctggct tagcggcgcc gcgagctcca gtgcgcgcac 180
 ccgtggccgc ctcccagccc tctttgccgg acgagctctg ggccgccaca agactaagga 240
 atggccaccc cgcccagag aagctgcccg tctttctcag ccagctctga ggggacccgc 300
 atcaagaaaa tctccatcga agggaacatc gctgcaggga agtcaacatt tgtgaatatc 360
 cttaaacaat tgtgtgaaga ttgggaagtg gttcctgaac ctggtgccag atggtgcaat 420
 gttc 424

<210> 718
 <211> 425
 <212> DNA
 <213> Homo sapiens

<400> 718
 gtcggctcct cgcgcgctcg cgtcccctcg tgcgggctcc agccgcagcc ttagcttcgg 60
 ctcccggctt ggggtggcgcg gccgtgccct cgttttggcc tccgaacgcg gctcgaatgg 120
 caagccaaaa ttctttcccg atagaatatg atacctttgg tgaactaaag gtgccaaatg 180
 ataagtatta tggcgcccag accgtgagat ctacgatgaa ctttaagatt ggaggtgtga 240
 cagaacgcac gccaaaccca gttattaaag cttttggcat cttgaagcga gcggccgctg 300
 aagtaaacca ggattatggt cttgatccaa agattgctaa tgcaataatg aaggcagcag 360
 atgaggtagc tgaaggtaaa ttaaattgatc attttctct cgtggtatgg cagactggat 420
 cagga 425

<210> 719
 <211> 413
 <212> DNA
 <213> Homo sapiens

<400> 719
 gccggggcgt ctccctcacc aatcatcact tctacgatga gtccaagcct ttcacctgcc 60
 tggacgggttc ggccaccatc ccatttgatc aggtcaacga tgactattgc gactgcaaag 120
 atggctctga cgagccaggc acggctgcct gtccaatgg cagcttccac tgcaccaaca 180
 ctggctataa gcccctgtat atcccctcca accgggtcaa cgatgggtgtt tgtgactgct 240
 gcgatggaac agacgagtac aacagcggcg tcatctgtga gaacacctgc aaagagaagg 300
 gccgtaagga gagagagtcc ctgcagcaga tggccgaggt caccgcgaa gggttccgtc 360
 tgaagaagat ccttattgag gactggaaga aggcacggga ggagaaacag aaa 413

<210> 720

<211> 414

<212> DNA

<213> Homo sapiens

<400> 720
 gaaagcctct tgtcatctct cagatgggtt ccaaaaagaa gcccaaaatt atccagcaaa 60
 acaaaaaaga gacctgcct caagtgaagg gagaggagat gccggcagga aaagaccagg 120
 aggccagcag gggctctgtt ccttcaggtt ccaagatgga caggagggcg ccagtacctc 180
 gcaccaaggc cagtggaaac gagcacaata agaaaggaac caaggaaagg acaaattggtg 240
 atattgttcc agaacgaggg gacatcgagc ataagaagcg gaaagctaag gaggcagccc 300
 cagccccacc caccgaggaa gacatctggt ttgacgacgt ggaccagcg gatatcgaag 360
 ctgccatagg tccagaggcg gccaaagatag cgaggaaaca gttgggtcag agcg 414

<210> 721

<211> 414

<212> DNA

<213> Homo sapiens

<400> 721
 ggcggcgcag gccgggctgg gcccgcgcgc ggcggcagcg gcgccccggg ccggaggcgg 60
 cccagccgag cggggccatgg ccaccgccat tcagaaccgg ctcaagtcgc gaggacttct 120
 accgcgaggg catcgagcac tgccgcagtt acaacgcgcg cctgtgcgcc gagcgcagcc 180
 tgcgactgcc ctctctcgac tcgcagaccg gcgtggccca gaacaactgc tacatctgga 240
 tggagaagac ccaccgcggg ccgggtttgg ccccgggaca gatttacacg taccgcgcc 300
 gctgttgag gaagaaacgg agactcaaca tctggagga cccagactc aggcctgcg 360
 agtacaagat cgactgtgaa gcaccctga agaaggaggg tggcctcccg gaag 414

<210> 722

<211> 412

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 262,396

<223> n = A,T,C or G

<400> 722
 gccagcctct ggtaaccatc ctctacttt ctatgtccat gaattaaatt gtcttgattt 60
 ttagatccca taagtgaaga catgcagtgt ttgactttct gtgccttatt tgacttaaca 120
 tagtgacctc ccattttcat ctgtgttgtt gcaaatgaca ggatctcatt cttttttatt 180
 gctgaatagt actccactgt gtatgtgtac cacatttctt tatccattca tctgttgatg 240
 ggacacttga gtcttcttcc anacttttgc ctattgtgaa caatgctgca acaaacagta 300
 tatgagaatg cagatatctt ccatatgttg attcctttct tttgggtata taccagcag 360

tgggattgct ggatcatatg gagctttatt tttagnTTTT tgaggacctc ca

412

<210> 723

<211> 451

<212> DNA

<213> Homo sapiens

<400> 723

tagtggatcc	aaagaaaaag	gctgctgac	aaaaaaccaa	agtgccagaa	cctactaaga	60
cctgttcaag	ccagcccaaa	cctgccggta	ccagtaccag	tacttccacc	agcactatct	120
caagcagcaa	caatggcaaa	cgtgcatctg	ccagtggcca	gcagccagct	gcaccccgtt	180
acctgcctcg	tgagggtgct	ccacgcttcc	gccagcaaga	acagaagcag	ctattaaaga	240
gaggccagcc	attgcctacg	gggactctaa	ccagtgtgag	cccaaccacg	ggtgctgggc	300
ctgcaggggt	aagcccacct	cccctacctg	gagccggaac	acagcatcat	cccagtaagc	360
tccaaccaga	tctcagtcac	agtggattgg	cagatcatta	tgaaaattcc	cactggggac	420
agcagcctac	ttacagaagc	gaagccaact	g			451

<210> 724

<211> 425

<212> DNA

<213> Homo sapiens

<400> 724

gggtgattca	gccctgactt	ctcaaaaagc	actgcacaga	ggaggaggca	gcagaacccc	60
acttcagctt	cttaggactc	tgcacttccc	cagaaggaag	aattaaaaat	gaatatgttc	120
aaggaagcag	tgaccttcaa	ggacgtggct	gtggccttca	cggaggagga	attggggctg	180
ctgggcccctg	cccagaggaa	gctgtaccga	gatgtgatgg	tggagaactt	taggaacctg	240
ctgtcagtg	ggcatccacc	cttcaaacia	gatgtatcac	ctatagaaa	aatgagcag	300
ctttggataa	tgacgacagc	aaccggaaga	cagggaaatt	taggagagaa	aatcaaagt	360
aagttaatta	ctgttcaaga	cagagaatca	gaagaagagc	tttcttgttg	gcaaactctg	420
caaca						425

<210> 725

<211> 421

<212> DNA

<213> Homo sapiens

<400> 725

ggacgaccga	acgcccccg	gaacaccggg	ccccgagctc	ggtcccgcgc	ccgaggatcc	60
tgcacggggc	tagatggctg	cgtcgggggc	gggagcggag	gtgagcgggc	gctagggccg	120
cgagcccccg	ccggcccttc	ctccagcgcc	ctgcggaccc	cgcagaaggc	gctcgcctcc	180
ctagccccga	aaaacatata	gatttttctc	gctgtggcaa	cggggacgtc	ctgatagatc	240
ctctgctcca	ataggcaact	ccggccttcc	ctgccttgac	ctggaacctt	ctgggaagg	300
cttgacaga	taaagtgcgc	gccttcttgc	gcttccgaac	ggaggcaacg	aaggcctggt	360
gggaagtaag	gtcccttttg	ttcccgacag	ggtggcgaa	actttggg	ctgcatgctt	420
g						421

<210> 726

<211> 413

<212> DNA

<213> Homo sapiens

<400> 726

gagatccatc ccggaagtgc ttaactogtgc totccatgcg ccggttctctg ggcgtcttag 60

```

agccaaggcg cgaggctcgg agtgagaggt agagctggag gggaccctaa gcgccctccg 120
cccgggacgt gagecgtcgc gccaccggg ctagaccggg cgccatcatg ctgcttctgc 180
caagcgccgc ggacggccgg ggcaccgcca tcaccacgc tctgacctct gcctctacac 240
tctgtcaagt tgaacctgtg ggaagatggg ttgaagcttt tgtaagagg agaaacagaa 300
atgcttctgc ctcttttcag gaactggagg ataagaaaga gttatccgag gaatcagaag 360
atgaagaatt gcagttggaa gagtttccca tgctgaaaac acttgatccc aaa 413

```

<210> 727

<211> 414

<212> DNA

<213> Homo sapiens

<400> 727

```

gggttttttgc agctggagat gctgcggatg taactcagga tataatgaga ctgactggtc 60
ccaagaattc atctctgaag ttacagaccc cttgtctgtg tccccctgcc gctgggctga 120
ggaatatattg gagcaatcag aggagaagct gtggctggga gaacctgagg gaacagccac 180
cgatcgctgg tatgatgaat atcatcctga ggaggatctg cagcacacgg ccagtgactt 240
tgtggccaaa gtggatgacc ccaaattggc taattctgag ggtacatcag atgcctgggt 300
tgaccagttc acaagaccag taaacacatc tgcccttgat atggagtttg aacgagccaa 360
gtcagctata gaagtctgat gtcgatttct gggacaagtt gcaggcagag ttgg 414

```

<210> 728

<211> 2170

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(2170)

<223> n = A,T,C or G

<400> 728

```

gctcgtctcc cgcgggcccg cgctcgcacc accgcttctc cctccctgtc gcagccgcgc 60
cgccgcgcag cgccccagcc acacgcgggc gggcagaagc cgcccgctct ccggaaaagt 120
ataacagaat tcattgaagt ggagaatttt taaagaaggt aacaaaaaga gaaagaaaat 180
gccgaaacca atcaacgtaa gagtaactac aatggatgct gagctggaat ttgccattca 240
gcccaataca actggcaaac aactttttga ccagggtggtg aaaacagttg gtttgcgtga 300
gggtctggttt tttgggctgc agtatgtaga cagcaaagggt tattctacat ggcttaaact 360
aaataaaaaag gtaacacagc aggatgttaa aaaagagaat cctttacagt tcaagtttag 420
agctaaattc tttcctgaag atgtttctga ggaattaatt caagaaataa cccagagact 480
cttcttcttg caagttaaag aagccatctt aaatgatgag atatattgcc cgccagaaac 540
tgcagttctt ttggcttctt atgctgtcca agccaagtat ggagattaca ataaagagat 600
tcataagcca ggctacctgk ctaatgatag actcctaccc cagcgtgtat tggacaaca 660
caaactaaca aaagaacagt ggggaagaaag aatacagaac tggcatgaag aacatagagg 720
aatgttaagg gaggattcta tgatggaata cctgaagatt gcacaagatc tagaaatgta 780
tggagtcaac tattttgaaa taaaaaataa aaaaggaact gaattgtggc taggtgttga 840
tgctttgggt ctgaatatatt atgagcatga cgacaagtta acacctaataa ttggttttcc 900
ctggagtga atcagaaata tttcatttaa tgacaaaaaa tttgttataa agccaatcga 960
caaaaaggca cctgattttg tgttttatgc acctcgtctg agaatcaata agcggatttt 1020
ggccttatgt atgggaaacc atgaactata catgcgaaga aggaagcctg atactattga 1080
agtacaacag atgaaggctc aggcaggga ggagaacat cagaagcagt tggaaagggc 1140
acaattagag aatgaaaaga agaaaagaga aatagcagaa aaggaaaagg aaagaataga 1200
acgtgaaaaag gaagagctaa tggaaacgtc aaaacaaatt gaagagcaga caattaaagc 1260

```

tcagaaagaa	ctagaagaac	agactcgaaa	agctctagaa	ctggatcaag	aacgaaaacg	1320
agcaaaagaa	gaagcagaac	gacttgaaaa	ggagcgtcga	gctgctgaag	aggcaaagtc	1380
tgccatagca	aaacaagctg	ccgaccagat	gaagaatcag	gagcagctag	cagcagaact	1440
tgctgaattc	actgccaaaga	ttgcacttct	agaggaagcc	aagaagaaaa	aggaagagga	1500
agcaactgag	tggcaacaca	aagcttttgc	agcccaggaa	gacttgaaaa	agaccaaaga	1560
agagttaaaa	actgtgatgt	ctgccccccc	tccacctcca	ccaccaccag	tcattcctcc	1620
aacagaaaaac	gaacatgatg	aacacgatga	gaataatgct	gaagctagt	ctgaattatc	1680
aaatgaagg	gtaatgaacc	atagaagcga	ggaagaacgt	gtaaccgaaa	cacagaaaaa	1740
tgagcgtgtt	aagaagcaac	ttcaggcatt	aagttcagaa	ttagcccaag	ccagagatga	1800
aaccaagaaa	acacaaaatg	atgttcttca	tgctgagaat	gttaaagcag	gccgtgataa	1860
gtacaagact	ctgcgacaga	ttcgacaagg	caatacaaa	cagcgtatcg	atgagtttga	1920
agcaatgtga	gagctgttat	tttgcataata	tgcttcttcat	aagctgaacc	accaacagag	1980
aaaagcaggc	ctttgcagat	atgatggaat	gcatccccacc	ttgccaaaagc	acttacacca	2040
gtttgactgt	gctagctaaa	agacaaaattt	aaggggagct	cttcaacatt	aaggcagtat	2100
gatatcatgc	ttggttttct	tttttctttt	ggtccaggga	atggagaatg	gtgttccatt	2160
gcctcttttt						2170

<210> 729

<211> 4747

<212> DNA

<213> Homo sapiens

<400> 729

gagaaggaga	aggctgccaa	gctggagatt	ctgcagcagc	aacttcaggt	ggctaataa	60
gccccgggaca	gtgcccagac	ctcagtgaca	caggcccagc	gggagaaggc	agagctgagc	120
cggaagggtgg	aggaactcca	ggcctgtgtt	gagacagccc	gccaggaaca	gcatgaggcc	180
caggcccagg	ttgcagagct	agagttgcag	ctgcggtctg	agcagcaaaa	agcaactgag	240
aaagaaaagg	tggcccagga	gaaggaccag	ctccaggagc	agctccaggc	cctcaaagag	300
tccttgaagg	tcaccaagg	cagccttgaa	gaggagaagc	gcagggctgc	agatgccctg	360
gaagagcagc	agcgttgtat	ctctgagctg	aaggcagaga	cccgaagcct	ggtggagcag	420
cataagcggg	aacgaaaagga	gctggaagaa	gagagggctg	ggcgcaagg	gctggaggct	480
cgattacagc	agcttgggga	ggcccatcag	gctgagactg	aagtcctgcg	gcgggagctg	540
gcagaggcca	tggctgcca	gcacacagct	gagagtga	gtgagcagct	cgtcaaagaa	600
gtagctgcct	ggcgtgagcg	gtatgaggat	agccagcaag	aggaggcaca	gtatggcgcc	660
atgttccagg	aacagctgat	gactttgaag	gaggaatgtg	agaaggcccg	ccaggagctg	720
caggaggcaa	aggagaagg	ggcaggcata	gaatcccaca	gcgagctcca	gataagccgg	780
cagcagaacg	aactagctga	gctccatgcc	aacctggcca	gagcactcca	gcaggctcaa	840
gagaagggaag	tcagggccca	gaagcttgca	gatgacctct	ccactctgca	ggaaaagatg	900
gctgccacca	gcaaagaggt	ggcccgttg	gagaccttgg	tgcgcaaggc	aggtgagcag	960
caggaaacag	cctcccggga	gttagtcaag	gagcctgcga	gggcaggaga	cagacagccc	1020
gagtggctgg	aagagcaaca	gggacgccag	ttctgcagca	cacaggcagc	gctgcaggct	1080
atggagcggg	aggcagagca	gatgggcaat	gagctggaac	ggctgcgggc	cgcgctgatg	1140
gagagccagg	ggcagcagca	ggaggagcgt	gggcagcagg	aaagggaggt	ggcgcggtg	1200
accagggagc	ggggccgtgc	ccaggctgac	cttgccctgg	agaaggcggc	cagagcagag	1260
cttgagatgc	ggctgcagaa	cgccctcaac	gagcagcgtg	tggagtctgc	taccctgcaa	1320
gaggcactgg	ctcatgccct	gacggaaaag	gaaggcaagg	accaggagtt	ggccaagctt	1380
cgtggtctgg	aggcagccca	gataaaaagag	ctggagggaac	ttcggaacaac	cgtgaagcaa	1440
ctgaagggaac	agctggctaa	gaaagaaaaag	gagcacgcac	ctggctcagg	agcccaatct	1500
gaggctgctg	gcaggacaga	gccaacaggc	cccaagctgg	aggcactgcg	ggcagagggtg	1560
agcaagctgg	aacagcaatg	ccagaagcag	caggagcagg	ctgacagcct	ggaacgcagc	1620
ctcgaggctg	agcgggcctc	ccgggctgag	cgggacagtg	ctctggagac	tctgcagggc	1680
cagttagagg	agaaggccca	ggagctaggg	cacagtcaga	gtgccttagc	ctcgcccaa	1740
cgggagttgg	ctgccttccg	caccaaggta	caagaccaca	gcaaggctga	agatgagtg	1800
aaggcccagg	tggcccgggg	ccggcaagag	gctgagagga	aaaatagcct	catcagcagc	1860

ttggaggagg	aggtgtccat	cctgaatcgc	caggctcctgg	agaaggaggg	ggagagcaag	1920
gagttgaagc	ggctggtgat	ggccgagtc	gagaagagcc	agaagctgga	ggagaggctg	1980
cgctgctgc	aggcagagac	agccagcaac	agtgccagag	ctgcagaacg	cagctctgct	2040
ctgcgggagg	aggtgcagag	cctccgggag	gaggctgaga	aacagcgggt	ggcttcagag	2100
aacctgcggc	aggagctgac	ctcacaggct	gagcgtgagg	aggagctggg	ccaagaattg	2160
aaggcgtggc	aggagaagtt	cttcagaaaa	gagcaggccc	tctccaccct	gcagctcgag	2220
cacaccagca	cacaggccct	ggtgagttag	ctgctgccag	ctaagcacct	ctgccagcag	2280
ctgcaggccg	agcaggccgc	tgccagaaaa	cgccaccgtg	aggagctgga	gcagagcaag	2340
caggccgctg	ggggactgag	ggcagagctg	ctgcggggcc	agcgggagct	tggggagctg	2400
attcctctgc	ggcagaaggt	ggcagagcag	gagcgaacag	ctcagcagct	gcgggcagag	2460
aaggccagct	atgcagagca	gctgagcatg	ctgaagaagg	cgcatggcct	gctggcagag	2520
gagaaccggg	ggctgggtga	gcggggccaa	cttggccggc	agtttctgga	agtggagttg	2580
gaccaggccc	gggagaagta	tgtccaagag	ttggcagccg	tacgtgctga	tgctgagacc	2640
cgtctggctg	aggtgcagcg	agaagcacag	agcactgccc	gggagctgga	ggtgatgact	2700
gccaagtatg	aggggtgcaa	ggtcaagggt	ctggaggaga	ggcagcgggt	ccaggaagag	2760
aggcagaaac	tcaactgccc	ggtggagcag	ctagagggtat	ttcagagaga	gcaaaactaa	2820
cagggtggaag	aactgagtaa	gaaactggct	gactctgacc	aagccagcaa	ggtgcagcag	2880
cagaagctga	aggctgtcca	ggctcaggga	ggcagagacc	agcaggaggc	ccagcgccct	2940
caggcccagc	tgaatgaact	gcaagcccag	ttgagccaga	aggagcaggc	agctgagcac	3000
tataagctgc	agatggagaa	agccaaaaaa	cattatgatg	ccaagaagca	gcagaaccaa	3060
gagctgcagg	agcagctgag	gacgctggag	cagctgcaga	aggaaaacaa	agagctgcga	3120
gotgaagctg	aacggctggg	ccatgagcta	cagcaggctg	ggctgaagac	caaggaggct	3180
gaacagacct	gccgccacct	tactgccag	gtgcgcacgc	tggaggcaca	ggttgcccat	3240
gcagaccagc	agcttcgaga	cctgggcaaa	ttccagggtg	caactgatgc	tttaaagagc	3300
cgtgagcccc	aggctaagcc	ccagctggac	ttgagtattg	acagcctgga	tctgagctgc	3360
gaggaggggg	ccccactcag	tatcaccagg	tcaggaggca	gccttcctcc	ctatgtctgt	3420
ttatggagtg	cctgctgttt	atcaggctgt	atcctagtga	gataaataag	atgtgatcta	3480
aattttattct	tagagaagaa	taaagaaaaa	cgggtattat	accagatatc	tatttagggc	3540
acagttggaa	taaaaagcaa	gtggtcaaga	aaggcttcgt	ggaagctatc	gctcctgctg	3600
agtectgaaa	gcatccatag	gtgtgtgtgc	caggttgacg	agaagagcag	tgtgaacaga	3660
ggctgtgaaa	gagcctgact	aagctgagat	gtgaggccag	gaaggcccat	tggagaccgg	3720
ctattaagac	ttgatcctaa	aggcattgag	gaaaccttgg	tggctgtaat	tgaagggttt	3780
aggagaaaaa	aaaaggaacc	ttggaagaat	ttgaaactga	agagtacatg	gttaatttgc	3840
atcttaaaaa	gattattcta	atagctagta	tagaagttaa	gactggaaaa	atgtttttat	3900
taaacaactta	catttactta	ttttgtgcta	gacataaagc	actcatgaca	attatacctg	3960
atztatcccc	caacactcgc	agtggaaacc	gccgttctcc	gcgcattgcc	accaccacag	4020
ccagcgccgc	cactgctgcc	gccattggtg	ccaccctcgc	agccaagggc	aaggcaaacg	4080
actaaagggc	cagtaccagt	gagtggcccc	acctgtgtcc	ccgatgctgc	cgtcacctgg	4140
tcctccgcct	actgtccctc	tcagtgcctt	ctctcagctc	ccaggccaac	agtagccaaa	4200
cccctagaga	cagtgatgcc	tgcgccgacc	ctggcctggt	ccctggctct	tcaactggcg	4260
cttctcggag	ctggcccagg	gggcctggag	catggacagt	gtgggcgctc	tccctacctt	4320
gcctcctttt	ttcttaaagc	aaagtcaact	ctccatcaca	accagatttg	aggctgggtt	4380
tgatggctgg	gtccttgggc	ctggccagtc	ttcctcttag	cctctggatc	tagaagggac	4440
cataagagga	gtaggccctg	gttccctgctg	tcctgggtgg	tgggcccagc	agggggccct	4500
actcttgaag	tccaggactg	ggtctgacct	ggtgggagca	cctgccagag	gatgctcttt	4560
ccagggacgg	atggggccctg	tgtctcagga	gtgggggttg	gggacagcct	tcagcagcag	4620
ctcacaccct	accttcccca	gaactgcact	gggggtggat	ttggagtgat	gggaagggtt	4680
ttaagggccg	gggatggatc	ttttctaaat	gttattactt	gtaaataaag	tctatttttc	4740
tcccgctg						4747

<210> 730

<211> 2264

<212> DNA

<213> Homo sapiens

<400> 730

```

gtttttttcg gcttggcctg ggcaggcgct tgtgtgtcca gggcgccggg cccggggagg 60
ccgggggtctc ggggtggccgc cggcccaggc gctggacggc agcaggatgg ggaaggcgaa 120
ggcccccgcc tccaagcgcg ccccgagcag ccccggtggc aagccgggtc ctgtcaagac 180
gctcactcgg aagaaaaaca agaagaaaaa aaggttttgg aaaagcaagg cgcggaagt 240
aagcaagaag ccagcaagcg gccccgggtg tgtggtgcga cctccaaagg caccagaaga 300
cttttctcaa aactggaagg cgctgcaaga gtggctgtcg aaacaaaaat ctcaggcccc 360
agaaaagcct cttgtcatct ctcagatggg ttccaaaaag aagcccaaaa ttatccagca 420
aaacaaaaaa gagacctcgc ctcaagtga gggagaggag atgccggcag gaaaagacca 480
ggaggccagc aggggctctg ttcttcagg ttccaagatg gacaggaggg cgccagtacc 540
tcgcaccaag gccagtggaa cagagcacia taagaaagga accaaggaaa ggacaaatgg 600
tgatattgtt ccagaacgag gggacatcga gcataagaag cggaaagcta aggaggcagc 660
cccagcccca cccaccgagg aagacatctg gtttgacgac gtggaccagc cgatatcga 720
agctgccata ggtccagagg cggccaagat agcgaggaag cagttgggtc agagcgaggg 780
cagcgtcagc ctcagcctcg tgaaagagca ggcttcggc ggcttgacaa gagccttagc 840
cttggaactgt gagatggtgg gcgtgggccc taagggggag gagagcatgg ccgcccggtg 900
gtccatcgtg aaccagtatg ggaagtgcgt ttatgacaag tacgtcaaac caaccgagcc 960
cgtgacggag tataggacag cggtcagtgg gatcggcct gagaacctca agcagggaga 1020
agagcttgaa gttgttcaga aggaagtggc agagatgctg aagggcagaa ttctagtggg 1080
gcacgctctg cataatgacc taaaggtact atttcttgat catccaaaaa agaagattcg 1140
ggacacacag aaatataaac ctttcaagag tcaagtaaag agtggaaggc cgtctctgag 1200
actactttca gagaagatcc ttgggtcca ggtccagcag gcggagcact gttcaattca 1260
ggatgccagc gcagcaatga ggctgtacgt catggtgaag aaggagtggg agagcatggc 1320
ccgagacagg cggccctgc tgactgtccc agaccactgc agtgacgacg cctagcagtc 1380
ctgcccctgt gctgtgtccc ccccgctaca gaggcaatgt gaccagtcac agggacagat 1440
cacatctccc cagagtggca actctggtga aaccttttca gaatcatggc agaggggctg 1500
ggcgtggtgc tactgagaag gtccctcctt ctcttgactt tgtggtctga aacctgggtc 1560
tactgtccat gtgtgttttg gcccgatgg tcagggtggg gagcagggac ggccatgggc 1620
acgcctggcc acgctttacc gactgctgac cccctgggcc aggtgaggtt ggggcctgtg 1680
ggcgcgcagt ccatacgggtg ctgtcactgc ccctcttcgg tgacaccctg ggggtgaggtg 1740
ctcagcacct tctctcagag gagccacatt ttctctctt gtgttagggg acataacaag 1800
ctctgctggg cttgagggac ccagaccagg tgtctgcagt cagctcctga gacacagctg 1860
gcgggcacaa caggtgttac atcaggggtt tccgttggcc gtttgaactt tgagcattta 1920
tctaaattaa attggcccag ggttggtctg tgggtcacc agcagaggct tctcccata 1980
gcagaggat gtgttgctg gccacggtga ctgcggttat tcctggaggt cggcagacat 2040
gccaaccttg ggctatttga gctggagaag ctatgtgat ctagccggtg gctttctggg 2100
ctaggcccca gtttgaggct cccctgggaa ctagagccag gaacagccag tggcactgac 2160
aaggggacgg agtccaaggc gttattgggc cacctgacag ctggacagaa aaggggcaga 2220
cacaccgagg atgcgattta aaataaatgc agatgtttac ttgg 2264

```

<210> 731

<211> 2990

<212> DNA

<213> Homo sapiens

<400> 731

```

aaaaaggctg ctgatcaaaa aaccaaagtg ccagaacctg ctaagacctg ttcaagccag 60
ccccaacctg ccggtaccag taccagtact tccaccagca ctatctcaag cagcaacaat 120
ggcaaacctg catctgccag tggccagcag ccagctgcat cccgttacct gcctcgtgag 180
gtgcctccac gcttccgcca gcaagaacag aagcagctat taaagagagg ccagccattg 240
cctacgggga ctctaaccag tgtgagccca acccagggtg ctgggcctgc aggggtaagc 300
ccacctcccc tacctggagc cggaacacag catcatccca gtaagctcca accagatctc 360
agtcatagtg gattggcaga tcattatgaa aattcccact ggggacagca gcctacttac 420

```

agaagcgaag	ccaactgcag	ctgggataaa	gtgataatag	ataggactga	caaggaggcg	480
tggccttcca	tcacaggaac	agagactgaa	tctgcctcag	aatgtactac	agacactgac	540
tctgcctcca	actgtggctc	agagaacagt	agcatggcta	cagggagtgc	ccagggcaac	600
ttcactggac	ataccaagaa	gacaaatggc	aataatggca	ccaatggcgc	actcgtccaa	660
agcccttcta	atcagagtgc	ccttggagca	gggggagcga	acagtaatgg	aagtgcggcc	720
agagtgtggg	gtgtagccac	aggctccagc	tctggcctgg	ctcactgctc	tgtcagtggg	780
ggggatggaa	aaatggacac	tatgattgga	gatgggagaa	gtcagaattg	ctggggtgct	840
tccaactcca	atgctggcat	taatcttaac	cttaatccta	atgccaaacc	agctgcctgg	900
cctgtacttg	gacatgaagg	aaccgtggcg	acaggcaacc	cttccagtat	ttgcagtcca	960
gtcagtgcc	taggtcaaaa	tatgggcaac	cagaacggga	acccaacagg	cacttttaggt	1020
gcttggggaa	acttgctgcc	acaagagagc	acagaaccac	aaacgtccac	ttctcagaat	1080
gtgtctttca	gcgcacaacc	tcagaacctt	aacactgatg	gaccaaataa	cactaacccc	1140
atgaactctt	cacccaaccc	tatcaatgca	atgcagacaa	atggactgcc	aaactggggc	1200
atggctgttg	gtatgggggc	catcatcccg	ccccacctgc	aaggccttcc	tgggtgcta	1260
ggatcatcag	tttctcaagt	cagtgggggc	agtgtgaag	gaataagcaa	ttctgtgtgg	1320
ggactgtccc	caggtaaccc	tgccacagga	aatagcaatt	ctgggttcag	tcaggggaat	1380
ggagacactg	tgaactcagc	attaagtgtc	aaacaaaatg	gatccagcag	tgctgtgcaa	1440
aaggaagga	gtggaggaaa	tgcttgggat	tcaggacctc	ctgctggtcc	tgggaatactc	1500
gcctggggaa	ggggcagtgg	caacaatggc	gttggttaata	tccattcagg	agcttggggc	1560
caccccagcc	gaagcacctc	taacggtgtg	aatggggaat	ggggaaagcc	cccaaaccag	1620
cattccaaca	gtgacatcaa	tgggaaagga	tcaacagggt	gggagagtcc	tagtgtcacc	1680
agccagaacc	ctaccgtaca	gcctggtggt	gaacacatga	actcctgggc	caaagcggca	1740
tcttctggaa	ctacagcaag	tgaaggaagt	agtgtgtgtt	ctggcaacca	caatgaagga	1800
agcactggga	gggaaggaac	gggagaaggc	cgaaggcgag	ataaagggat	tatagaccaa	1860
gggcacatcc	agttgccaa	gaatgatctt	gacccaagag	ttctgtctaa	tactggttgg	1920
ggacagactc	ctgtaaagca	aaacactgcc	tgggaatttg	aagaatcccc	taggtctgaa	1980
aggaaaaatg	acaatgggac	agaggcctgg	ggttgtgcag	ctactcaggc	ttcaaactca	2040
ggggggaaga	acgatgggtc	catcatgaac	agtacaaata	cctcttcagt	atctgggtgg	2100
gtcaacgcgc	cacctgccgc	tgtgccagca	aacacagggt	ggggagacag	caacaacaaa	2160
gcgccaaggg	cccggggggt	tggggggact	cgataagctc	tactgctggt	agtactgctg	2220
ctgctgccaa	gagtggccat	gcttggagt	gggcccga	tcaggaggac	aagtcaacca	2280
cctgggggtga	gcctccaaag	cccaaattccc	aacactgggg	agatggacaa	agatcaaata	2340
cagcctggag	tgcaggaggg	ggagattggg	cagattcatc	gtctgtcctt	ggacacttgg	2400
gggatgggaa	aaaaaatgga	tctggatggg	atgctgacag	taatagggtca	gggtctggtt	2460
ggaatgacac	cacgagatct	gggaacagt	gctggggcaa	cagcacaat	acaaaggcca	2520
atccagggtac	aaactggggg	gagacttta	aacctggccc	ccaacagaac	tgggctagca	2580
aacccaaga	caacaatgtg	agtaactggg	gaggagctgc	ttctgtgaaa	cagacaggaa	2640
cagggtggat	cgggggggccg	gtaccggtca	aacagaagga	cagcagtga	gcaactggct	2700
gggaagaacc	ctatacacccg	tccattcgcc	gcaaaatgga	aattgatgat	ggtacctcag	2760
cttgggggga	cccaagcaac	tataacaata	aaactgtaaa	catgtgggat	agaaacaacc	2820
cggatcatcca	gagcagtacc	acgaccaata	ccaccaccac	caccaccact	accacgagca	2880
acaccacaca	cagggtcgag	acgccgcccc	cgaccaggc	cgtactcag	ctgaatcgat	2940
caccgttgct	tgggtccaggt	aggaaaggt	tttcatgttt	ctttacaagt		2990

<210> 732

<211> 2247

<212> DNA

<213> Homo sapiens

<400> 732

gactcgcgag	agaggactca	cggacctcca	ggacctatta	acttgacaga	cccgccctc	60
tattcgagcc	agcccaactc	ggagaactca	gagtcacct	cgagagtaaa	gaaagctctt	120
agagtttttt	tttttttgac	aaatctatct	taaatgtcag	ttcaatatcc	acggcgacga	180

```

gccacagcag gtgagaaacc tggaaatgag cctgaagagg tgaagctgca gaatgccagc 240
aaacagattg tgcagaatgc aatcctgcaa gctgtgcagc aagtctccca ggagagtcag 300
cgcagagaag agagaatcag tgacaaccgg gaccacatcc aactgggcgt tggggagtta 360
accaagaagc acgaaaagaa gtaacatggt ggatttggct cttgacatgt gcttggtttc 420
tagccttcct cttagtatag gacgcatctc caaaatgttg ccagtaaagc aaaccgaagt 480
gtcaccggca cctagctgta gaatgaattc acactagccc ctggctgaga agcactgttt 540
tgaaaaagtg cattagacga ttctgttcat atttatgcag tgcctctgag acatagtggg 600
gccaaatatg acaactgtaat tgcaaaaagta gttttgcagg ccaatttact tctgcctttt 660
atgcgttcct tctgtgaatt taacaagcag cctttttgct gaaatactga atacagtact 720
gagttcttta tgatatatta aaaagacatg ctagaaaggt gagggaatgc agtttttagtt 780
accttcaa at gtgaaattga aggcctttaag tgggttcagg tctaagatca aattaagaaa 840
agggaaattc taaggctgag tccctcggga ccataccaag gcatttacta atatttatgt 900
tatttttaaga aagggaggag tttaagtttc tcaagaactc agtcttttag tctcaattct 960
ctgaatgatt tcataattgg tgtttatgct ctgtgtagaa atcttttggg aatattatgg 1020
atctcttttc tcaagattaa ataaaaataag acaagtgagt ctacacatgt gagttgccaa 1080
tgactcattt ccttagcagc ctcattggaga atggctagaa gtgtagattt cttcaacagc 1140
tgcctatcat taagagactt acacttgggg ctgattatgg ggtgcaacat ccttggaagg 1200
gattctgggg tccttaacga atgctgtttt gccactaggc tatgcatttg cattaggacc 1260
ttactaactt ttcccattca cacattaaat tttttttttg agattatgaa aatcatacag 1320
gtcaggaata catgagaaca caatggggac agtaaagtga cagtgttttg aatgcagtga 1380
cagagatatg tgtgtgtaca cgtgtaataa agttatctgt gcagcaacag gatcaatccc 1440
tgctccactt ctgtgaggat aatgcacata tttctggagt atctacagtc ccatttcctg 1500
ggcttcacaa aagttattga attggtgcta ttggggacag aggaagaatt tgaccttggg 1560
taaaaacctt ctggtttcag agtatcaata tctacatttg atttttttt aaagcaaagt 1620
attcgggtat aaattgtgac tgatattaag atatacttct aaaattccaa tatgctacag 1680
tttctagaat aaatagttag ataatagata atgaatgaaa aatatcttac cagctttggt 1740
atgctatctc ccacagtgca caggtggaat aaattcacag gaaacatgga aggagaagga 1800
agcagaaggg cttaaaattt aaagattggt tactcacaa gatttctttt agcagaattc 1860
atgccaagtg aagagtgagt ttaagtcgac caaaagtc atactgatg tgatataatt 1920
gcatagcata catagtgaga atgaaggat tcagggaat tattcaggag tgccacaaat 1980
aaaataaata aataaatcta atgctttag tttgtaagt atctggtact atgtctact 2040
agatatctgg atatgaccag cctttgtttt tgctgtcaag tgacagaaac atataaacat 2100
actatttttc ctctctgatg tgtctgtact aaaaaattg gaatttttgg aacatcttat 2160
tgacctctgt gtctaaatgt tatttataaa taaaacacat acagctttga aatatcttaa 2220
gcaaaaaaaaa aaaaaaaaaa actcgag 2247

```

<210> 733
 <211> 50
 <212> PRT
 <213> Homo sapiens

```

<400> 733
Asp Ser Arg Glu Arg Thr His Gly Pro Pro Gly Pro Ile Asn Leu Thr
          5              10              15
Asp Pro Pro Leu Tyr Ser Ser Gln Pro Asn Ser Glu Asn Ser Glu Ser
          20              25              30
Ser Ser Arg Val Lys Lys Ala Leu Arg Val Phe Phe Phe Leu Thr Asn
          35              40              45
Leu Ser
          50

```

<210> 734
 <211> 76

<400> 734

<210> 735

<211> 74

<212> PRT

<213> Homo sapiens

<400> 735

[illegible]